The Inside Information Regime of the MAR and the Rise of the ESG Era

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Peter O. Mülbert
University of Mainz and ECGI

Alexander Sajnovits
University of Mainz

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Abstract

The rise in ESG investing has been characterized as an "investor revolution" and a manifestation of "social change". The current coronavirus pandemic will arguably intensify the impact of such social change, with the "S" and "G" components of ESG, in particular, having been brought into sharper focus during the crisis. The issue of the extent to which ESG factors are (currently) of considerable importance – and, in particular, are likely to become even more so in the future – for the performance of share prices remains a highly controversial one in financial economics. However, where an empirically substantiated effect of ESG-related information on the prices of financial instruments can be shown, the question of whether such information is also of relevance to the inside information regime of the Market Abuse Regulation ("MAR") arises and must be answered. This article explores the potential effect of ESG-related information and an increase in ESG-compliant investments on the prohibition on insider dealing and the obligation to publicly disclose inside information. We believe that the ESG preferences of a critical mass of real-life investors and, as a corollary, ESG-related information, are and will continue to be of great importance to the inside information regime. However, the intense debate regarding the precise depiction of the 'reasonable investor' within the meaning of Art. 7 MAR indicates that the relevance of ESG-related information to the inside information regime of the MAR is by no means clear. In light of these uncertainties, and given its efforts to promote sustainable finance, the EU legislature would be well advised to further specify the concept of inside information with a particular focus on ESG-related information.

Keywords: ESG, sustainable finance, investor preferences, market abuse regulation, insider dealing, inside information, reasonable investor, materiality.

JEL Classifications: G30, G32, G41, K22, Q51.

Peter O. Mülbert*
Chair of Civil Law, Commercial and Commercial Law, Banking Law
University of Mainz
Jakob-Welder-Weg 9
D-55128 Mainz, Germany
phone: +49 6131-39-23040
e-mail: muelbert@uni-mainz.de

Alexander Sajnovits
Assistant Professor
University of Mainz
Jakob-Welder-Weg 9
D-55128 Mainz, Germany
phone: +49 6131-39-37279
e-mail: sajnovits@uni-mainz.de

*Corresponding Author

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*Peter O. Mülbert** and *Alexander Sajnovits***

The rise in ESG investing has been characterized as an "investor revolution" and a manifestation of "social change". The current coronavirus pandemic will arguably intensify the impact of such social change, with the "S" and "G" components of ESG, in particular, having been brought into sharper focus during the crisis. The issue of the extent to which ESG factors are (currently) of considerable importance – and, in particular, are likely to become even more so in the future – for the performance of share prices remains a highly controversial one in financial economics. However, where an empirically substantiated effect of ESG-related information on the prices of financial instruments can be shown, the question of whether such information is also of relevance to the inside information regime of the Market Abuse Regulation ("MAR") arises and must be answered. This article explores the potential effect of ESG-related information and an increase in ESG-compliant investments on the prohibition on insider dealing and the obligation to publicly disclose inside information. We believe that the ESG preferences of a critical mass of real-life investors and, as a corollary, ESG-related information, are and will continue to be of great importance to the inside information regime. However, the intense debate regarding the precise depiction of the 'reasonable investor' within the meaning of Art. 7 MAR indicates that the relevance of ESG-related information to the inside information regime of the MAR is by no means clear. In light of these uncertainties, and given its efforts to promote sustainable finance, the EU legislature would be well advised to further specify the concept of inside information with a particular focus on ESG-related information.

A. Introduction

Environmental, social and governance-compliant investing ("ESG investing")[1] has emerged as a major social topic in recent years.[2] While ESG investments to date represent only a small portion of the overall assets under management worldwide, and an even smaller portion of the total assets invested,[3] the sector is experiencing considerable growth.[4] This development has been driven, in particular, by institutional investors, who in many cases have certainly been encouraged to make such investments by regulatory requirements imposed in the wake of the stewardship movement which has been gaining ground at the global level.[5] In April 2019, for example, more than 2,000 organizations representing a total investment volume of USD 86

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* Prof. Dr. iur., Chair of Private Law, Commercial and Business Law, Banking Law, Faculty of Law and Economics and Director of the Center for German and International Law of Financial Services, University of Mainz, Germany.
** Dr. iur., M.Sc. (Oxford), Assistant Professor and Post-Doctoral Fellow (*Akademischer Rat* and *Habilitand*), Chair of Private Law, Commercial and Business Law, Banking Law, Faculty of Law and Economics, University of Mainz, Germany.

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[1] See *infra* B.I.1.
[2] Cf. BlackRock, Portfolio perspectives, February 2020, Sustainability: The tectonic shift transforming investing, p. 3; *Lasse Heje Pedersen/Shaun Fitzgibbons/Lukasz Pomorski*, "Responsible Investing: The ESG-Efficient Frontier", SSRN-Working Paper 2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3466417; *Henry L. Friedman/Mirko S. Heinle*, "Taste, information, and asset prices: implications for the valuation of CSR", Review of Accounting Studies 21 (2016), 740, 741; *Lubos Pastor/Robert F. Stambaugh/Lucian A. Taylor*, "Sustainable Investing in Equilibrium", nber-Working Paper No. 26549, 2020, p. 1, available at: http://www.nber.org/papers/w26549; *David A. Katz/Sabastian V. Niles/Carmen X. W. Lu*, "ESG in the Mainstream: Sell-Side Analysts Addressing ESG Concerns", Harvard Law School Forum on Corporate Governance, 29 March 2020, available at: https://corpgov.law.harvard.edu/2020/05/29/esg-in-the-mainstream-sell-side-analysts-addressing-esg-concerns/; *Rüdiger Veil/Katrin Deckert/Jörn Axel Kämmerer/Christian Voigt*, "Nachhaltige Kapitalanlagen durch Finanzmarktregulierung", 2019, p. 2; *Dirk Schoenmaker/Willem Schramade*, Principles of Sustainable Finance, 2018; *Johannes Köndgen*, "Sustainable Finance: Wirtschaftsethik – Ökonomik – Regulierung", in: Katharina Boele-Woelki/Florian Faust/Matthias Jacobs/Thilo Kuntz/Anne Röthel/Karsten Thorn/Birgit Weitemeyer (ed.), Festschrift für Karsten Schmidt zum 80. Geburtstag, volume 1, 2019, 671. On the history of ESG investing, see *John C. Coffee*, "The Future of Disclosure: ESG, Common Ownership, and Systematic Risk", ECGI Law Working Paper No. 541/2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3678197, p. 22 et seqq.; *Max M. Schanzenbach/Robert H. Sitkoff*, "Reconciling Fiduciary Duty and Social Conscience: The Law and Economics of ESG Investing by a Trustee", Stanford Law Review 72 (2020), 381, 392 et seqq.
[3] BlackRock (fn. 2), p. 3. This is also pointed out by *Köndgen* (fn. 2), 671, 674 et seqq.
[4] See *infra* B.I.3.
[5] *Tao Chen/Hui Dong/Chen Lin*, "Institutional shareholders and corporate social responsibility", Journal of Financial Economics 135 (2020), 483; *Rajna Gibson/Philipp Krueger/Peter Steffen Schmidt*, "ESG rating disagreement and stock returns", ECGI Finance Working Paper No. 651/2020, 2, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3433728; *Dionysia Katelouzou/Alice Klettner*, "Sustainable Finance and Stewardship: Unlocking Stewardship's Sustainability Potential", ECGI Law Working Paper No. 521/2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3578447. See also *Köndgen* (fn. 2), 671, 684 et seqq.

trillion signed the United Nations Principles of Responsible Investment (UNPRI).[6] Then, in January 2020, Blackrock once again addressed open letters to both the CEOs of the companies in which it invests[7] and its investor clients[8], announcing that it would be taking greater account of ESG criteria when selecting investment securities in the future.[9] Key market observers expect that there will be a (re)allocation of capital on a massive scale to ESG-compliant investments[10] in the near future as the result of fundamental social change,[11] and regulatory measures are being, and will continue to be, introduced at the national, supranational and international level[12] to further bolster this development.[13] The current coronavirus pandemic will arguably intensify the impact of such social change, the "S" and "G" components of ESG, in particular, having been brought into sharper focus during the crisis.[14]

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6 *Brad M. Barber/Adair Morse/Ayako Yasuda*, "Impact Investing", NBER Working Paper No. 26582, 2019, 1, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2705556; *Köndgen* (fn. 2), 671, 673.

7 Available at: https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter.

8 Available at: https://www.blackrock.com/corporate/investor-relations/blackrock-client-letter.

9 See *Attracta Mooney/Billy Nauman*, "Larry Fink rules on the best global standards for climate risk reporting", in: Financial Times, 20 January 2020. In any case, BlackRock was subsequently commissioned to advise the EU on its "green regulation for banks". With regard to the latter point, see *Patrick Temple-West/Mehreen Khan*, "BlackRock to advise EU on green regulation for banks", Financial Times Online, 13 April 2020, available at: https://www.ft.com/content/da821c64-b2f8-4119-afa1-fdafa9a57918.

10 BlackRock (fn. 2), p. 3; c.f. *Michal Barzuza/Quinn Curtis/David H. Webber*, "Shareholder Value(s): Index Fund ESG Activism and the New Millennial Corporate Governance", ECGI Law Working paper No. 545/2020, p. 41 et seqq., available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3439516.

11 See *infra* B.I.3.

12 See infra B.I.2.b).

13 See *infra* B.I.2. So far, the development in the EU is much more driven by regulatory pressure then it is in the US. Cf. *Coffee* (fn. 2), p. 4, 8.

14 Cf. *Billy Nauman*, "Coronavirus is strengthening the hand of ESG investors", in: Financial Times Online, 5 May 2020, available at: https://www.ft.com/content/19047cda-0648-48a9-a512-87653149026c; *Jamie Powell*, "Coronavirus as the ESG acid test", in: Financial Times Alphaville, 2 April 2020, available at: https://ftalphaville.ft.com/2020/04/02/1585807115000/Coronavirus-as-the-ESG-acid-test/; Morgan Stanley, "Research Report: Why the Coronavirus Puts a New Lens on ESG Investing", available at: https://www.morganstanley.com/ideas/coronavirus-corporates-esg-investing; *David M. Silk/David A. Katz/Sabastian Niles*, "Key ESG Considerations in the crisis", in: Harvard Law School Forum on Corporate Governance, 21 April 2020, available at: https://corpgov.law.harvard.edu/2020/04/21/key-esg-considerations-in-the-crisis/; *Kirsten Sullivan/Amy Silverstein/Leeann Galezio Arthur*, "ESG and Corporate Purpose in a Disrupted World", in: Harvard Law School Forum on Corporate Governance, 10 August 2020, available at: https://corpgov.law.harvard.edu/2020/08/10/esg-and-corporate-purpose-in-a-disrupted-world/. Moreover, ESG-oriented investments seem to be faring relatively well during the corona crisis, cf. *Gillian Tett/Billy Nauman/Patrick Temple-West/Andrew Edgecliffe-Johnson*, "ESG shines in the crash; legal milestone for ratings", Financial Times Moral Money Newsletter, 16 March 2020, available at: https://www.ft.com/content/dd47aae8-ce25-43ea-8352-814ca44174e3; however, a different view is taken, for instance, by *Elisabeth Demers/Jurian Hendrikse/Philip Joos/Baruch Lev*, "ESG Didn't Immunize Stocks Against the COVID-19 Market Crash", in: Harvard Law School Forum on Corporate Governance, 8 September 2020, available at: https://corpgov.law.harvard.edu/2020/09/08/esg-didnt-immunize-stocks-against-the-covid-19-market-crash/; *Michael O'Leary*, CEO of Ryanair: "I suspect an awful lot of the environmental agenda and targets will be put on the back burner for a number of years", as quoted by *Billy Nauman*, "Coronavirus is strengthening the hand of ESG investors", in: Financial Times Online, 5 May 2020, available at: https://www.ft.com/content/19047cda-0648-48a9-a512-87653149026c.

In any case, stock prices will not remain unaffected by the aforementioned (re)allocation of capital throughout the (long) transition period, in light of increasing demand for securities from issuers with a positive ESG track record.[15] The issue of the extent to which ESG factors are (currently) of considerable importance – and, in particular, are likely to become even more so in the future – for the performance of share prices remains a highly controversial one in financial economics.[16] However, where an empirically substantiated effect of ESG-related information on the prices of financial instruments can be shown, the question of whether such information is also of relevance to the inside information regime of the Market Abuse Regulation ("MAR") arises and must be answered.[17] Pursuant to the MAR, information will only be deemed to constitute inside information, the existence of which is decisive for both the insider dealing prohibitions imposed by Article 14 of the MAR and the disclosure obligations imposed by Article 17 of the MAR, if its public disclosure would be likely to have a significant effect on the prices of the financial instruments in question or on the price of related derivative financial instruments.[18]

This article will explore the potential effect of ESG-related information and an increase in ESG-compliant investments on the prohibition on insider dealing and the obligation to publicly disclose inside information in the following manner: Chapter B. will give an overview of the upcoming ESG era, in which we briefly take stock of developments to date (B.I.) and then describe the theoretical and empirical foundations of capital market theory which are relevant in that context (B.II.). Section C. will address the implications of the trend towards socially responsible investing for the prohibition on insider dealing and the obligation to publicly disclose inside information. Here, the focus is on the concept of inside information, which is central to both regimes, and, in particular, on the situations in which public disclosure of information would be likely to have a significant effect on the prices of financial instruments (C.II. and C.III.) and the impact that changing investor preferences may have in this respect (C.IV.). The article will conclude with a brief outlook as to what the future may hold in this regard (D.).

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[15] See *infra* B.II.2.

[16] See *infra* B.II.

[17] Cf. for the concept of materiality under US securities law, *Coffee* (fn. 2), p. 14; *Sabrina Bruno*, "Climate Corporate Governance: Europe vs. USA?", European Company and Financial Law Review 2019, 687, 707 et seqq. with regard to climate change related risk.

[18] See *infra* C.I.

B. The Rise of the ESG Era

I. ESG: Taking Stock of the Trend towards ESG-Compliant Investing

1. Definition

ESG investing is an umbrella term for investment decisions which take environmental, social and governance aspects into account. Other terms which are often used synonymously with it are "sustainable finance", "sustainable investing" or "socially responsible investment" ("SRI").[19] However, a uniform terminology has not yet been established.[20] On the contrary, these terms have to date been used to refer to a wide range of different investment strategies and styles. This raises two issues, in particular:

Firstly, the specific role of ESG criteria in investment decisions remains unclear. Portfolio management, in practice, usually distinguishes between strategies of negative, positive or so-called norm-based screening and active ESG integration, on the one hand, and so-called impact investing, on the other hand.[21] In the case of screening strategies and ESG integration techniques, the maximization of financial returns remains the overriding guiding principle, although ESG criteria may influence the selection of portfolio assets.[22] More extensive ESG integration places greater importance on the pursuit of ESG objectives relative to the maximization of financial returns, with impact investing being the strongest manifestation of this approach.[23] In impact investing, the provision of financial support to a company with positive ESG characteristics takes precedence over the financial return which may be generated by any such investment. In addition, there are strategies of genuine shareholder activism which

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[19] *Schanzenbach/Sitkoff* (fn. 2), 381, 392 et seq.; *Eckart Bueren*, "Sustainable Finance", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2019, 813, 816; GSIA, 2018 Global Sustainable Investment Review, p. 7, available at: http://www.gsi-alliance.org/wp-content/uploads/2019/06/GSIR_Review2018F.pdf; cf. the definition of Eurosif: "Sustainable and responsible investment ("SRI") is a long-term oriented investment approach which integrates ESG factors in the research, analysis and selection process of securities within an investment portfolio. It combines fundamental analysis and engagement with an evaluation of ESG factors in order to better capture long-term returns for investors, and to benefit society by influencing the behaviour of companies.", available at: https://www.eurosif.org/mission/.

[20] *Florian Möslein/ Karsten Engsig Sørensen*, "Nudging for Corporate Long-Termism and Sustainablity? Regulatory Instruments from a Comparative and Functional Perspective", Columbia Journal of European Law 24 (2018), 391, 393. Taking a critical view, *Paul Brest/Ronald J. Gilson/Mark A. Wolfson*, How Investors can (and can't) Create Social Value, ECGI Law Working Paper No. 394/2018, p. 6 et seqq., available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3150347. Furthermore, *Köndgen* (fn. 2), p. 671, 695 et seq.

[21] Cf. *Amir Amel-Zadeh/George Serafeim*, "Why and How Investors Use ESG Information: Evidence from a Global Survey", Financial Analyst Journal 74 (2018), 87.

[22] *Bueren* calls this form of investment "Sustainable Finance 1.0"; see *Bueren* (fn. 19), 822 et seq.

[23] *Bueren* (fn. 19), 824: "Sustainable Finance 2.0 and 3.0"; *Tamas Barko/Martijn Cremers/Luc Renneboog*, "Shareholder Engagement on Environmental, Social, and Governance Performance", ECGI Finance Working Paper No. 509/2017, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2977219; *Andreas Hoepner*, "ESG Shareholder Engagement and Downside Risk", Harvard Law School Forum on Corporate Governance, 6 August 2020, available at: https://corpgov.law.harvard.edu/2020/08/06/esg-shareholder-engagement-and-downside-risk/.

not only provide for an influence of ESG concerns on investment decisions but also involve shareholders actively seeking to improve the ESG profile of a company.[24] A more recent example of the latter scenario is the enormous pressure faced by the board of Rio Tinto in the wake of a scandal over the destruction of an historic Aboriginal site as part of the expansion of an iron ore project, which ultimately resulted in the resignation of the company's CEO.[25]

Secondly, the definition does not provide any information about the specific ESG criteria which are to be taken into account, the manner in which the fulfilment of these criteria is to be assessed and the identity of the parties undertaking such assessment, or the approach to be taken in the event of conflicting objectives.[26] This is where various rating agencies, index providers and other data vendors[27] (the market leaders being Morningstar, Bloomberg and MSCI) and, more recently, the EU, with its Taxonomy Regulation[28], have taken the lead.

The development of uniform criteria will play a major role in improving the means of assessing the economic consequences of ESG investments, on the one hand, and ESG-compliant corporate conduct, on the other hand. Currently, the market is still a long way from having any such uniform and reliable criteria in place.[29]

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[24] Cf. GSIA (fn. 19), p. 3, which distinguishes between the following strategies: 1. Negative/exclusionary screening, 2. Positive/best-in-class screening, 3. Norms-based screening, 4. ESG integration, 5. Sustainability themed investing, 6. Impact/community investing, and 7. Corporate engagement and shareholder action.

[25] The Financial Times Editorial Board, "The Rio Tinto watershed: The departure of the miner's chief executive shows the power of ESG", in: FT-online, 12 September 2020, available at: https://www.ft.com/content/06dde6ba-c50c-412d-b286-131d0c1d70c1. For more examples, see *Madison Condon*, "Externalities and the Common Owner", Washington Law Review 95 (2020), 1, 18 et. seqq.; *Barzuza/Curtis/Webber* (fn. 10), p. 24 et seqq.; an empirical study was conducted by *Alexander Dyck/Karl V. Lins,/Lukas Roth/Hannes F. Wagner*, "Do institutional investors drive corporate social responsibility? International evidence", Journal of Financial Economics 131 (2019), 693, providing evidence that institutional investors "push for stronger firm-level E&S performance around the world".

[26] *Bueren* (fn. 19), 817; *Köndgen* (fn. 2), p. 671, 680 (fundamental and irresolvable conflict of objectives); cf. *Schanzenbach/Sitkoff* (fn. 2), 381, 430 emphasizing the necessarily subjective judgement decisions.

[27] See *Bueren* (fn. 19), 831.

[28] See *infra* B.I.2.b).

[29] Cf. *Miriam Rozen*, "Ethical investors want more proof of good deeds", Financial Times Online, 16 April 2020, available at: https://www.ft.com/content/5c943b66-5a22-11ea-abe5-8e03987b7b20; *Gibson/Krueger/Schmidt* (fn. 5), p. 2; *Florian Berg/Julian F. Kölbel/Roberto Rigobon*, "Aggregate Confusion: The Divergence of ESG Ratings", MIT Sloan School Working Paper 5822-19, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3438533; *Jill E. Fish*, "Making Sustainability Disclosure Sustainable", Georgetown Law Journal 107 (2019), 923; *Coffee* (fn. 2), 31.

2. Regulatory "Nudging"

a) The Status Quo: A Prevalence of Soft Law, a Dearth of Mandatory Rules

Within the EU, no specific legal framework currently exists for ESG investments. Rather, various soft law initiatives[30] have shaped the market to date,[31] with a number of legal requirements only recently having been introduced:

Directive 2014/95/EU (the "CSR Directive") obligates companies to disclose matters which are of relevance from an ESG perspective in their financial statements.[32] Although this obligation applies to companies rather than to investors,[33] it provides an essential basis for the determination of ESG ratings and benchmarks, for example, which are of little informative value in the absence of company-specific disclosure.[34]

By way of contrast, the requirements imposed by Directive (EU) 2017/828[35] (the "Shareholder Rights Directive") apply to institutional investors and asset managers and obligate them to draw up a participation policy (stewardship approach[36]), which must also disclose the manner in which these companies monitor portfolio companies with regard to their social and environmental impacts (second sentence of Article 3g(1)(a) of the Shareholder Rights Directive).[37]

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[30] In particular the "Green Bond Principles" developed by ICMA (ICMA, The Green Bond Principles, June 2018, available at: https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/). See *Rüdiger Veil*, "Europa auf dem Weg zu einem Green Bond Standard", WM Zeitschrift für Wirtschafts- und Bankrecht 2020, 1093; *Köndgen* (fn. 2), p. 671, 674. An overview of further soft law is given in *Bueren* (fn. 19), 838 et seqq.

[31] *Bueren*, (fn. 19), 835.

[32] *Möslein/Engsig Sørensen* (fn. 20), 391, 410 et seq.; *Veil* (fn. 30), 1093 et seq. with reference to the dual materiality restriction.

[33] For a critical view, see *Wolfgang Schön*, "Der Zweck der Aktiengesellschaft – geprägt durch europäisches Gesellschaftsrecht?", Zeitschrift für das gesamte Handels- und Wirtschaftsrecht 180 (2016), 278, who speaks of a subjugation of the stock corporation to politically influenced public welfare concerns by means of a "refined mechanism of action" (authors' own translation).

[34] Cf. *Coffee* (fn. 2), p. 32. In that regard, it seems desirable that the big four accounting firms have recently published a framework for ESG reporting standards. See *Gillian Tett*, "Big Four accounting firms unveil ESG reporting standards", FT-Online, 22 September 2020, available at: https://www.ft.com/content/16644cb2-f0c1-4b32-b44c-647eb0ab938d.

[35] Directive (EU) 2017/828 of the European Parliament and of the Council of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement.

[36] This is – also at the international level – a gateway for ESG matters, see *Bueren* (fn. 19), 828 et seq.; *Paul Davies*, "The UK Stewardship Code 2010-2020: From Saving the Company to Saving the Planet", ECGI Law Working Paper 506/2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3553493; *Katelouzou/Klettner* (fn. 5).

[37] *Wolf-Georg Ringe*, "Stewardship and Shareholder Engagement in Germany", ECGI Law Working Paper No. 501/2020, p. 7 et seq., available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3549829; *Iris H.-Y. Möslein/Engsig Sørensen* (fn. 20), 391, 423 et seqq.; *Chiu*, " European Shareholder Rights Directive proposals: a critical analysis in mapping with the UK Stewardship Code?", ERA Forum 17 (2016), 31; *Deirdre Ahern*, " The Mythical Value of Voice and Stewardship in the EU Directive on Long-term Shareholder Engagement: Rights Do Not an Engaged Shareholder Make", in: Cambridge Yearbook of European Legal Studies 20 (2018), 88; *Jens*

In addition, Article 8(3)(c)(ii) of Regulation (EU) No. 1286/2014 (the "PRIIPs Regulation"), for example, requires that certain environmental or social objectives to be attained by a financial product should be stated in the product information sheet.[38] Furthermore, Regulation (EU) 2015/760 on European long-term investment funds and Regulation (EU) No. 346/2013 on European social entrepreneurship funds provide for ESG-related investment vehicles of their own – and even a partial sustainability label.[39]

b) New Initiatives Paving the Way for Greater Juridification

Prior to the outbreak of the coronavirus pandemic, sustainable finance was one of the defining topics in European financial market law in recent times, with the European Commission, the EU agencies[40] and also the ECB as part of the Network for Greening the Financial System[41] launching initiatives to promote ESG investment.[42] In the midst of the coronavirus crisis, the European Commission has confirmed that the "ongoing COVID-19 outbreak in particular shows the critical need to strengthen the sustainability and resilience of our societies and the ways in which our economies function".[43]

By way of contrast to the situation in the US, where no such *regulatory* pressure seems to exist[44], – these initiatives also tie in with the next steps in the process of juridification, some of which are of a distinctly libertarian paternalistic nature, as set out, in particular, in the "Action

Koch, "Der Kapitalanleger als Corporate Governance-Akteur im Rahmen der neuen §§ 134 a ff. AktG", Zeitschrift für Bank- und Kapitalmarktrecht 2020, 1; *Bueren* (fn. 19), 846; *Tobias Tröger,* "Die Regelungen zu institutionellen Investoren, Vermögensverwaltern und Stimmrechtsberatern im Referentenentwurf eines Gesetzes zur Umsetzung der zweiten Aktionärsrechterichtlinie (ARUG II)", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2019, 126.

38 See *Bueren* (fn. 19), 850 et seq.; furthermore, *Petra Buck-Heeb*, in: Heinz-Dieter Assmann/Uwe H. Schneider/Peter O. Mülbert (ed.), Wertpapierhandelsrecht, 7th ed. 2019, Article 8 of Regulation (EU) No 1286/2014 mn. 45 et seqq., who, however, doubts that this constitutes essential product information for retail investors.

39 *Bueren* (fn. 19), 851.

40 See *EBA*, Action Plan on Sustainable Finance, 6 December 2019, available at: https://eba.europa.eu/sites/default/documents/files/document_library//EBA%20Action%20plan%20on%20sustainable%20finance.pdf; ESMA, Strategy on Sustainable Finance, 6 February 2020, available at: https://www.esma.europa.eu/sites/default/files/library/esma22-105-1052_sustainable_finance_strategy.pdf.

41 See Network for Greening the Financial System, A call for action: Climate change as a source of financial risk, April 2019, available at: https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs_first_comprehensive_report_-_17042019_0.pdf.

42 For an overview, see *Bueren* (fn. 19), 813.

43 Available at: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/2020-sustainable-finance-strategy-consultation-document_en.pdf.

44 Cf. *Coffee* (fn. 2), p. 4, 8. However, also in the US, an increasing pressure from institutional investors on companies is reported, see *Thomas Lee Hazen*, "Social Issues in the Spotlight: The Increasing Need to Improve Publicly-Held Companies' CSR and ESG Disclosures", Working Paper 2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=%203615327; *Coffee* (fn. 2), p. 12.

Plan: Financing Sustainable Growth" of the European Commission.[45] The catalogue of measures contained in the action plan explicitly aims to "reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth".[46] This is to be achieved by means of the following ten measures:

(1) Establishment of a clear and detailed EU taxonomy, a classification system for sustainable activities,

(2) Creation of an EU Green Bond Standard and labels for green financial products,

(3) Fostering of investment in sustainable projects,

(4) Incorporation of sustainability considerations into financial advice,

(5) Development of sustainability benchmarks,

(6) Improved integration of sustainability considerations within ratings and market research,

(7) Clarification of the duties of asset managers and institutional investors as regards sustainability,

(8) Introduction of a "green supporting factor" into the prudential rules applicable to banks and insurance companies within the EU,

(9) Strengthening of sustainability disclosure and accounting rule-making, and

(10) Fostering of sustainable corporate governance and attenuation of short-termism in capital markets.[47]

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[45] European Commission, Action Plan: Financing Sustainable Growth, 8 March 2018, COM (2018) 97 final. This was preceded in January 2018 by the final report of the High-Level Expert Group on Sustainable Finance (HLEG), available at: https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf. Also, *Köndgen* (fn. 2), p. 671, 689, describes the action plan as "indirectly steering the market and promoting it positively in other respects" (authors' own translation); *Jens Ekkenga*, "Investmentfonds als neue Kontrollagenten einer "nachhaltigen" Realwirtschaft: Sinnvolle Instrumentalisierung oder schrittweise Demontage der Kapitalmärkte in Europa?", WM Zeitschrift für Wirtschafts- und Bankrecht 2020, 1664.

[46] European Commission (fn. 45), p. 2 et seqq.; see *Bueren* (fn. 19), 826; *Elke Gurlit*, "Die Entwicklung des Banken- und Kapitalmarktrechts seit 2017 – Teil I –", WM Zeitschrift für Wirtschafts- und Bankrecht 2020, 57, 74 et seq.; *Köndgen* (fn. 2), p. 671, 688 et seqq.

[47] See "Renewed sustainable finance strategy and implementation of the action plan on financing sustainable growth", available at: https://ec.europa.eu/info/publications/sustainable-finance-renewed-strategy_en. For further details, see *Bueren* (fn. 19), 855 et seq.; *Florian Möslein/ Karsten Engsig Sørensen*, "The Commission's Action Plan for Financing Sustainable Growth and Its Corporate Governance Implications", European Company Law Journal 15 (2018), 221; *Gurlit* (fn. 46), 74 et seq.; *Köndgen* (fn. 2), p. 671, 688 et seqq.

In May 2018, the European Commission presented its first legislative package for the implementation of the Action Plan.[48] This included (i) a proposal for a regulation on the establishment of a framework to facilitate sustainable investment (the so-called Taxonomy Regulation[49]), (ii) a proposal for a regulation on disclosures relating to sustainable investments and sustainability risks,[50] and (iii) a proposal for a regulation on low carbon benchmarks and positive carbon impact benchmarks.[51]

Regulation (EU) 2019/2088 on disclosures relating to sustainable investments and sustainability risks[52] (the second proposal in the legislative package put forward in May 2018) and Regulation (EU) 2019/2089 amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks[53] (the third proposal in the legislative package put forward in May 2018) entered into force on 10 December 2019. An agreement on the Taxonomy Regulation was reached by way of the trilogue procedure on 18 December 2019.[54] On 22 June 2020, the Taxonomy Regulation was published in the Official Journal; it subsequently entered into force

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[48] With regard hereto, see *Veil/Deckert/Kämmerer/Voigt* (fn. 2), p. 158 et seqq.; *Maximilian Stumpp*, "Die EU-Taxonomie für nachhaltige Finanzprodukte – Eine belastbare Grundlage für Sustainable Finance in Europa?", Zeitschrift für Bankrecht und Bankwirtschaft 2019, 71; *Köndgen* (fn. 2), p. 671, 688 et seq., 692 et seqq.

[49] COM/2018/353 final, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018PC0353&from=DE.

[50] COM/2018/354 final, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018PC0354&from=DE.

[51] COM/2018/355 final, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52018PC0355. In addition, between 24 May and 21 June 2018, the European Commission requested feedback on amendments to delegated acts pursuant to the Markets in Financial Instruments Directive ("MiFID II") to integrate ESG considerations into the advice provided by investment firms and insurance distributors to individual clients (https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_de#hleg). It has also formally sought technical advice from EIOPA and ESMA on the ways in which asset managers, insurance undertakings and investment or insurance advisors should integrate sustainability risks and, where appropriate, other sustainability factors into the areas of organisational requirements, operating conditions, risk management and target market assessment (https://ec.europa.eu/info/sites/info/files/letter-eiopa-esma-24072018_en.pdf). On 28 September 2018, the Commission requested that EIOPA provide an opinion on sustainability pursuant to Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance ("Solvency II"), in particular on those aspects related to climate change (https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/180828-letter-eiopa-solvency-2_en.pdf). Finally, on 1 February 2019, the European Commission asked ESMA, EBA and EIOPA for an opinion on the unreasonable exertion of short-term pressure on companies by the financial sector (https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190201-call-for-advice-to-esas-short-term-pressure-cover-letter_en.pdf), with this call for advice being made as part of Action 10 of the Action Plan.

[52] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector. See *Veil* (fn. 30), 1094.

[53] Regulation (EU) 2019/2089 of the European Parliament and of the Council of 27 November 2019 amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks.

[54] See European Commission, Press release – Sustainable finance: Commission welcomes deal on an EU-wide classification system for sustainable investments (Taxonomy), available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_19_6793.

on the 20th day after its publication and is now in large part applicable (cf. Article 27 of the Taxonomy Regulation).[55]

3. A Massive Increase in ESG Investments and Social Change

The total volume of ESG-compliant investments is difficult to determine – in part, because ESG criteria have not yet been standardized.[56] According to the Global Sustainable Investment Review 2018 of the Global Sustainable Investment Alliance (GSIA), which is widely used by industry stakeholders, at the beginning of 2018, the total volume of ESG investments was 30.7 billion US dollars, an increase of 34% in just two years.[57] The 2018 report of the US Forum for Sustainable and Responsible Investment likewise indicates an investment volume of 12 billion US dollars for the US alone.[58] The European SRI Study 2018 conducted by EuroSIF assumes similar volumes for Europe, taking account of all of the aforementioned investment strategies.[59]

According to Morningstar, ESG-oriented collective investment schemes generated an additional volume of approximately 120 billion euros in Europe in 2019 alone, a 58 % increase as compared to 2018.[60] Following on from the corona pandemic sell-off in the first quarter of 2020, global inflows into ESG-oriented collective investment schemes were up 72% in the second quarter of 2020, with Europe clearly taking the lead and accounting for 86 % of these inflows.[61] While these investment volumes still account for only a small proportion of the assets invested in collective investment schemes overall, and for an even smaller proportion of total assets invested, including private investments,[62] the trend towards a significant reallocation of capital is clearly discernible.

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[55] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088. The EU Technical Expert Group on Sustainable Finance had already published its Technical Support on the Taxonomy Regulation in March 2020, available at: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf. For more details, see *Danny Busch*, "Sustainable Finance Disclosure in the EU Financial Sector", EBI Working Paper 2020 – no. 70, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3650407.

[56] See *supra* B.I.1.

[57] Available at: http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR_Review2018.3.28.pdf.

[58] Available at: https://www.ussif.org/files/US%20SIF%20Trends%20Report%202018%20Release.pdf.

[59] Report available at: http://www.eurosif.org/wp-content/uploads/2018/11/European-SRI-2018-Study.pdf.

[60] *Holly Black,* "Record-Shattering Year for Sustainable Investments", 4 February 2020, available at: https://www.morningstar.co.uk/uk/news/199190/record-shattering-year-for-sustainable-investments.aspx.

[61] Morningstar, "Global Sustainable Fund Flows: ESG fund assets recover strongly, hitting USD 1 trillion mark in Q2 2020", 2020, available at: https://www.morningstar.com/content/dam/marketing/shared/pdfs/Research/Global_Sustainable_Fund_Flows_Q2_2020.pdf?utm_source=eloqua&utm_medium=email&utm_campaign=&utm_content=23897.

[62] BlackRock (fn. 2), p. 3.

This development has been driven by social change, which is set to intensify greatly over the years and decades to come, not least due to two factors: The demographically induced shift in wealth towards younger generations (from Baby Boomers to Millennials) with their greater awareness of ESG issues and the increasing frequency of natural disasters due to climate change.[63]

US legal scholars and industry participants argue that the fiduciary duties of many institutional investors in the US (particularly trustees subject to ERISA) will pose an obstacle to this development, given that the sole interest rule does not permit trustees to include other (moral) considerations in their investment decision-making than the financial interests of their beneficiaries.[64] Asset managers in other jurisdictions face quite similar restrictions.[65] However, it appears unclear whether these restrictions will substantially hamper this trend towards ESG. Most of these restrictions will be subject to the terms of the individual contractual relationship (investment contract) which may be adopted in the wake of the aforementioned social change and changing investor demands.

II. The Impact of ESG-Related Information on Share Prices

The impact of ESG-related information on the development of share prices has to date been assessed quite differently in the context of financial economics. At the outset, one must distinguish between the question of whether ESG factors, as potential mechanisms of impact, are relevant to the fundamental value of securities, thus making them relevant to share prices on the basis of neo-classical capital market theory (B.II.1.), and the question of whether a substantial shift in investor preferences is to be expected, which will impact share prices by way of rising demand even in the absence of any relevance of the ESG factors in question to said fundamental value (B.II.2.).

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[63] BlackRock (fn. 2), p. 5; *Barzuza/Curtis/Webber* (fn. 10), p. 41 et seqq. describing said transfer of wealth and citing numerous evidence that Millennials are less concerned about financial returns and more interested in ESG issues than previous generations (Baby Boomers, in particular).

[64] *Schanzenbach/Sitkoff* (fn. 2), 381, 399 et seqq. with further references.

[65] Freshfields Bruckhaus Deringer, "A legal framework for the integration of environmental, social and governance issues into institutional investment: Produced for the Asset Management Working Group of the UNEP Finance Initiative, October 2005, p. 30 et seqq., available at: https://www.unepfi.org/fileadmin/documents/freshfields_legal_resp_20051123.pdf; Rory Sullivan/Will Martindale/Elodie Feller/Anna Bordon, "Fiduciary Duties in the 21st Century", 2014, p. 24 et seqq., available at: http://unepinquiry.org/wp-content/uploads/2015/09/Fiduciary-duty-21st-century.pdf; European Commission, Resource Efficiency and Fiduciary Duties of Investors, Final Report, produced by Ernst & Young Cleantech and Sustainability Services (France), 2015, p. 29 et seqq., available at: https://ec.europa.eu/environment/enveco/resource_efficiency/pdf/FiduciaryDuties.pdf; see also *Bueren* (fn. 19), 848 et seq.

1. The Neo-Classical Capital Market Theory

In capital market theory, the fundamental value of a financial instrument is dependent on future cash flows and the risk associated with the financial instrument.[66] It is determined by discounting all future cash flows, i.e. by determining the present value of the financial instrument (discounted cash flow method).[67] While the future cash flows for shares are largely dependent on the future earnings potential of the company in question,[68] the discount factor corresponds to the return expected by investors and thus to the issuer's cost of capital. According to the capital asset pricing model (CAPM), which remains the dominant methodology in practice,[69] the beta of the financial instrument determines the expected return.[70] The beta expresses the (historical) sensitivity of an individual security to the market portfolio, i.e. the percentage change in the return on the security in relation to a percentage change in the return on the market portfolio. The beta is calculated by multiplying the standard deviation/volatility of the individual security by the correlation of the individual security to the market portfolio and dividing the result by the standard deviation of the market portfolio.[71]

In the capital markets, the information held and valuations undertaken by all investors are manifested in their behaviour affecting supply and demand. According to the semi-strong variant of the efficient capital market hypothesis (ECMH), the market price will be at least very

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66 Cf., in general, *Jonathan Berk/Peter DeMarzo*, Corporate Finance, 4th ed. 2017, chap. 3.3, 3.4 and 3.5.

67 Alternatively, valuations are also carried out on the basis of comparable financial instruments. This is particularly appropriate in the case of companies not listed on a stock exchange. For a discussion of share valuation on the basis of comparable shares of companies, see *Berk/DeMarzo* (fn. 66), chap. 9.4, p. 326 et seqq.

68 On the basis of the dividend discount model, dividends alone are used as future cash flows (*Berk/DeMarzo* (fn. 66), chap. 9.1, 9.2). Alternative approaches are the so-called total pay-out and free cash flow valuation models. The former takes not only dividends but also share buybacks into account (for further details, see *Berk/DeMarzo* (fn. 66), chap. 9.3.). The free cash flow valuation model takes cash flows to equity and debt capital providers into account (*Berk/DeMarzo* (fn. 6, chap. 9.3.). In the present context, the distinction between these models is irrelevant, given that all in any case proceed on the same basis, namely that only future cash flows and the discount factor, i.e. the financial risk, are relevant for valuation purposes.

69 Alternative and commonly used models are the multi-factor models, such as the so-called arbitrage pricing theory (APT) or the Fama-French-Carhart multi-factor model. With regard to these models, see again *Berk/DeMarzo* (fn. 66), chap. 13.7, p. 501 et seqq. For details of the foundations of the arbitrage pricing theory, see *Stephen A. Ross*, "The arbitrage theory of capital asset pricing", Journal of Economic Theory 13 (1976), 341 and for information on the Fama-French-Carhart multi-factor model, see *Eugene F. Fama/Kenneth R. French*, "Common risk factors in the returns on stocks and bonds", Journal of Financial Economics 33 (1993), 3; *Mark M. Carhart*, "On Persistence in Mutual Fund Performance", Journal of Finance 52 (1997), 57.

70 (E[Ri] = rf + ßi (E[RMkt] – rf), whereby E[Ri] = expected return; rf = risk-free rate; ßi = beta security to market portfolio; E[RMkt] = expected return market portfolio).

71 ßi = (SD(Ri) x Corr(Ri, RMkt))/SD(RMkt), whereby SD = standard deviation; Corr = correlation. For further details as regards the CAPM, see *Tim Koller/Marc Goedhart/David Wessels*, Valuation. Measuring and Managing the Value of Corporations, 6th ed. 2015, p. 283 et seqq.; *Richard A. Brealey/Stewart C. Myers/Franklin Allen*, Principles of Corporate Finance, 11th ed., 2014, p. 200 et seqq.; *Berk/DeMarzo* (fn. 66), chap. 11.7, p. 417 et seqq.

close to the fundamental value at any point in time, given that the share price will immediately reflect all publicly available information concerning future cash flows and the discount factor.[72]

In taking only the future cash flows and the discount factor into account for the determination of the fundamental value of securities, the commonly used methods proceed on the assumption that investors – at least when taken as a whole – are solely interested in maximizing their financial returns.[73] The manner in which, or the business activity by means of which, the cash flows in question are generated will be irrelevant from the outset.[74]

ESG factors may, within the framework of these neo-classical assumptions, affect share prices where they affect either (i) future cash flows or (ii) the discount factor.[75] Specifically:

(i) Firstly, as regards the impact of ESG factors on future cash flows, a positive ESG profile can lead to increased competitiveness – for example, through improved innovation management or human capital –, which in turn can lead to higher returns (the so-called cash flow channel[76]).[77] It is also conceivable that future cash flows could be impacted by ESG factors affecting the risk profile of the company in question:[78] By virtue of their superior compliance systems, companies with a positive ESG profile are less likely to commit serious compliance violations which could have a negative impact on their value and thus their share price.[79] In

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72 *Berk/DeMarzo* (fn. 66), chap. 9.5, p. 333 et seq.; *Koller/Godehardt/Wessels* (fn. 71), p. 65 et seqq.

73 *Eugene F. Fama/Kenneth French*, "Disagreement, tastes, and asset prices", Journal of Finance 83 (2007), 667, 668. It is a recognised fact that not all traders act on the basis of a rational evaluation of fundamental information (information traders). There are also so-called noise traders in the market who do not base their trading decisions on an evaluation of fundamental value information. However, provided that the latter type of trader does not gain the upper hand over the information traders, the neo-classical theory holds that arbitrage transactions undertaken by information traders will keep the market price close to the fundamental value. See *Koller/Goedhart/Wessels* (fn. 71), p. 66 et seqq.

74 *Henry L. Friedman/Mirko S. Heinle*, "Taste, Information, and Asset Prices: Implications for the Valuation of CSR", Review of Accounting Studies 21 (2016), 740, 741.

75 *Guido Giese/Linda-Eling Lee/Dimitris Melas/Zoltán Nagy/Laura Nishikawa*, "Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance", Journal of Portfolio Management 45:5 (2019), 1, 3; BlackRock (fn. 2), p. 4.

76 *Giese/Lee et al.* (fn. 75), 3.

77 *Giese/Lee et al.* (fn. 75), 4; *Alan Gregory/Rajesh Tharyan/Julie Whittaker*, "Corporate Social Responsibility and Firm Value: Disaggregating the Effects on Cash Flow, Risk and Growth", Journal of Business Ethics 124 (2014), 633; BlackRock (fn. 2), p. 4; see also *Colin Meyer*, Prosperity: better business makes the greater good, 2018, p. 122.

78 *Giese/Lee et al.* (fn. 75), 5; *Rui Albuquerque/Yrjö Koskinen/Chendi Zhang*, "Corporate Social Responsibility and Firm Risk: Theory and Empirical Evidence", Management Science 65 (2019), 4451; *Karl V. Lins/Henri Servaes/Ane Tamayo*, "Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility during the Financial Crisis", Journal of Finance 72 (2017), 1785, 1810 et seqq.

79 *Giese/Lee et al.* (fn. 75), 5 et seq.

addition, climate change can have a negative impact on the revenues and operating profits of certain companies and sectors.[80]

(ii) Secondly, it is conceivable that ESG factors could affect the discount rate by influencing the cost of capital, due to the operation of the so-called systemic risk transmission channel[81]. Based on the assumptions adopted in accordance with the CAPM, the beta of the financial instrument determines an issuer's cost of capital.[82] A positive ESG profile should make companies less susceptible to systematic market shocks, thereby exposing them to a lower level of systematic risk.[83] According to the CAPM, in which the beta is a measure of a company's systematic risk exposure, lower systematic risk results in a reduction in the expected return and thus the cost of capital.[84] Since the cost of capital corresponds to the discount factor for shares, lower systematic risk results in a higher fundamental value for the shares in question,[85] provided that the predicted cash flows will remain unchanged.

Despite these theoretically plausible implications, no consensus has emerged to date in the context of capital market research with regard to the impact of ESG factors on cash flows and the cost of capital.[86] For example, some commentators argue that the investments associated with an improvement in the ESG profile could also indicate agency problems, given that there is a risk of overinvestment in cases in which company managers wish to improve their company's ESG profile primarily on the basis of external factors.[87] Moreover, from the

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80 *Jawad M. Addoum/David T. Ng/Ariel Ortiz-Bobea*, "Temperature Shocks and Industry Earnings News", SSRN-Working Paper 2019, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3480695; *Nora M. C. Pankratz/Rob Bauer/Jeroen Derwall*, "Climate Change, Firm Performance, and Investor Surprises", SSRN-Working Paper 2019, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3443146.

81 *Giese/Lee et al.* (fn. 75), 6.

82 See *supra* fn. 71.

83 *Albuquerque/Koskinen et al.* (fn. 78), 4451; *Giese/Lee et al.* (fn. 75), 7 et seqq.; *Gregory/Tharyan et al.* (fn. 77), 633; *Sadok El Ghoul/Omrane Guedhami/Chuck C. Y. Kwok/Dev Mishra*, "Does corporate social responsibility affect the cost of capital?", Journal of Banking and Finance 35 (2011), 2388; *Christina E. Bannier/Yannik Bofinger/Björn Rock*, "Doing Safe by Doing Good: ESG Investing and Corporate Social Responsibility in the U.S. and Europe", CFS Working Paper Series 621, available at: https://www.uni-giessen.de/fbz/fb02/fb/professuren/bwl/bannier/team/190424ESGPaper.pdf; BlackRock (fn. 2), p. 4; *Andreas G. F. Hoepner/Ioannis Oikonomou/Zacharias Sautner/Laura T. Starks/Xiaoyan Zhou,* "ESG shareholder engagement and downside risk", ECGI Finance Working Paper No. 671/2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2874252.

84 *Giese/Lee et al.* (fn. 75), 6.

85 *Giese/Lee et al.* (fn. 75), 6.

86 *Friedman/Heinle* (fn. 74), 745; *Beiting Cheng/Ioannis Ioannou/George Serafeim*, "Corporate social responsibility and access to finance", Strategic Management Journal, 35 (2014), 1, 2 et seqq.; see also the overview of the status of research at *Gordon L. Clark/Michael Viehs*, "The implications of corporate social responsibility for investors", Working Paper 2014, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2481877.

87 *Ronald W. Masulis/Syed Walid Reza*, "Agency Problems of Corporate Philanthropy", Review of Financial Studies 28 (2015), 592; *Henrik Cronqvist/Frank Yu*, "Shaped by their daughters: Executives, female socialization, and corporate social responsibility", Journal of Financial Economics 126 (2017), 543.

perspective of the assumptions of portfolio theory, some scholars doubt that investors will withdraw capital from non-ESG-compliant stocks, as any restriction of investable financial stocks could lead to sub-optimal diversification, especially in the case of non-ESG-compliant financial stocks having little or no correlation with ESG-compliant financial stocks.[88] In contrast, *Madison Condon* and then *John C. Coffee* have recently pointed out that, due to the lower susceptibility of companies with a positive ESG profile to systemic risks (especially climate risk), broadly diversified institutional investors, in particular, have a special interest in actively influencing their portfolio companies to improve their ESG profile.[89] This will hold true, in particular, for passive index funds, which do not have the option of disinvestment.[90] For such investors, pushing for a better ESG profile might be a viable strategy even if it reduces the profitability of the individual portfolio company in question, as long as this strategy lowers the overall susceptibility of their portfolio to systemic market shocks and tail events.[91] Therefore, rather than disinvestment, we may see active improvement of the ESG profile of individual companies to the detriment of their share price.

Finally, no unambiguous empirical evidence as yet exists with regard to a correlation between ESG factors and stock market performance.[92] While empirical studies relating to the period from 2002 to 2010 indicated only minor reactions in share prices to ESG-related news,[93] recent empirical studies have increasingly shown a positive correlation between a favourable ESG

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[88] *Köndgen* (fn. 2), p. 671, 682 et seq.
[89] *Coffee* (fn. 2), p. 13 ff., 28 ff.; *Condon* (fn. 25), 1, 18 et seqq.
[90] Cf. *Condon* (fn. 25), 1, 18.
[91] Cf. *Luca Enriques*, "Missing in Today's Shareholder Value Maximization Credo: The Shareholders", 22 September 2020, available at: https://promarket-org.cdn.ampproject.org/c/s/promarket.org/2020/09/22/milton-friedman-value-maximization-credo-is-missing-the-shareholders/?amp.; for more details on that argument, see *Condon* (fn. 25), 1, 6; *Coffee* (fn. 2), p. 28 et seqq.
[92] *Olivier David Zerbib*, "A Sustainable Capital Asset Pricing Model (S-CAPM): Evidence from Green Investing and Sin Stock Exclusion", Working Paper 2020, p. 3 et seq., available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3455090; *Albuquerque/Koskinen et al.* (fn. 78), 4452.
[93] *Gunther Capelle-Blancard/Aurélien Petit*, "Every Little Helps? ESG News and Stock Market Reaction", Journal for Business Ethics 157 (2019), 543, with the authors also identifying a small but significant impact of negative ESG-related news.

profile and company value.[94] Some commentators expect these effects to intensify further in the years to come.[95]

2. Changing Investor Preferences: From the Maximization of Financial Returns to Impact Investing

Significant changes in investor preferences could play a major role in shaping the impact of ESG factors on share prices in the future.[96] Were a sufficiently large number of investors to cease to exclusively pursue the goal of maximizing financial returns and instead take ESG factors into account, assigning them equal weighting or even priority when making investment decisions,[97] the resultant share prices would systematically deviate from the assumptions adopted in accordance with common capital market equilibrium models.[98] A rise in demand for financial instruments from issuers with a positive ESG profile would lead to a higher market price for the securities in question[99] – irrespective of the impact of ESG factors on future cash flows or the discount factor.[100] Conversely, companies with a negative ESG profile will face

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[94] *Gunnar Friede/Timo Busch/Alexander Bassen*, "ESG and Financial Performance: Aggregated Evidence from More than 2000 Empirical Studies", Journal of Sustainable Finance and Investment 5 (2015), 210 with an evaluation of more than 2000 empirical studies; *Rajesh Kumar Bhaskaran/Irene Wei Kiong Ting/Sujit K. Sukumaran/Saraswathy Divakaran Sumod*, "Environmental, social and governance initiatives and wealth creation for firms: An empirical examination", Managerial and Decision Economics 41 (2020), 710; *Muhammad Azeem Qureshi/Sina Kirkerud/Kim Theresa/Tanveer Ahsan*, "The impact of sustainability (environmental, social, and governance) disclosure and board diversity on firm value: The moderating role of industry sensitivity", Business Strategy and Environment 29 (2020), 1199; *Ellen Pei-yi Yu/Christine Qian Guo/Bac Van Luu*, "Environmental, social and governance transparency and firm value", Business Strategy and the Environment 27 (2018), 987.

[95] *Albuquerque/Koskinen et al.* (fn. 78), 4452.

[96] Especially BlackRock (fn. 2), p. 3; *Robert G. Eccles/Svetlana Klimenko*, "The Investor Revolution", Harvard Business Review May-June 2019, p. 106.

[97] With regard to the question of when and under what conditions investors are subjectively willing to accept lower returns resulting from ESG-oriented investment: *Arno Riedl/Paul Smeets*, "Why Do Investors Hold Socially Responsible Mutual Funds?", Journal of Finance 72 (2017), 2505; cf. also *Köndgen* (fn. 2), p. 671, 677 et seqq., 684 et seqq.

[98] Cf. *Fama/French* (fn. 73), 676, according to whom deviations of the expected return from the CAPM (alphas) may be significant where investors with different (e.g. ESG) preferences: (i) hold a substantial portion of the invested assets, (ii) have preferences across a wide range of assets, (iii) deviate significantly from the market portfolio through their investments and (iv) significantly undervalue assets that do not match their preferences. Taking a sceptical view, *Brest/Gilson et al.* (fn. 20), p. 14 et seqq., whose argumentation is based on the existing arbitrage oportunities of investors who seek only to maximize their financial returns. The aspect of changing investor preferences becomes particularly relevant if the hypothesis of an underperformance of the ESG market compared to the overall market holds true (see *Köndgen* (fn. 2), p. 671, 682 et seq.). In this case, rational investors who are only interested in maximizing their financial returns will not turn to ESG-compliant investments, even over the long term. Based on the hypothesis that the ESG market will generate returns in excess of those generated by the market as a whole, rational investors who are interested in maximizing financial returns will also reallocate their capital. However, the latter reallocation process will be further reinforced by impact investments.

[99] *Friedman/Heinle* (fn. 73), 760; *Pedersen/Fitzgibbons et al.* (fn. 2), p. 17; *Manapon Limkriangkrai/SzeKee Koh/Robert D. Durand*, "Environmental, Social, and Governance (ESG) Profiles, Stock Returns, and Financial Policy: Australian Evidence", Pacific Basin Finance Journal 35 (2014), 56.

[100] Cf. *supra* B.II.1.

increasing equity costs, which in turn will lead to a decline in their enterprise value.[101] The more investors are inclined to attribute a greater importance to the ESG profile of an issuer in relation to its potential to maximize financial returns, the stronger this effect will be. Moreover, herd behaviour could even provide further impetus for this development, i.e. by prompting investors who do not themselves have a preference for ESG-compliant stocks to also invest in such financial securities in anticipation of, or at least by way of speculation on, the shift in preference described herein.[102]

Some commentators believe that current market prices fully anticipate, and thus already reflect, this impending reallocation of capital.[103] However, the trend towards greater ESG investing is still in its infancy and the duration of the reallocation process cannot be reliably predicted – as such, it does not lend itself to analysis at the present time, a phenomenon which has also been known to arise in connection with other long-term and structural developments.[104]

C. Implications for the Inside Information Regime

I. Inside Information as a Core Element of the Prohibition on Insider Dealing and the Obligation to Publicly Disclose Inside Information

Pursuant to the MAR, the concept of inside information is a core element[105] of both the prohibition on insider dealing and the obligation to publicly disclose inside information.[106]

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[101] *Pedersen/Fitzgibbons et al.* (fn. 2), p. 6, *H. Arthur Luo/Ronald J. Balvers*, "Social Screens and Systematic Investor Boycott Risk", Journal of Financial and Quantitative Analysis 52 (2017), 365; *Zerbib* (fn. 92).

[102] Cf. *Justyna Przychodzen/Fernando Gómez-Bezares/Wojciech Przychodzen/Mikel Larreina*, "ESG Issues among Fund Managers—Factors and Motives", Sustainability 8 (2016), 1078. This is ultimately also the strategy BlackRock recommends in its previously cited Portfolio perspectives newsletter (BlackRock (fn. 2)).

[103] Cf. BlackRock (fn. 2), p. 3; *Pedersen/Fitzgibbons et al.* (fn. 2), p. 17.

[104] BlackRock (fn. 2), p. 5; cf. for example *Stefano DellaVigna/Joshua M. Pollet*, "Demographics and Industry Returns", American Economic Review 97 (2007), 1667, who show, on the basis of changes in taste with increasing age and long-foreseen demographic changes, that effects on the profitability of the industry with regard to certain products could have been predicted well in advance without any appearance of the information in question having been factored into share prices at an early stage.

[105] *Klaus J. Hopt*, "Europäisches und deutsches Insiderrecht", Zeitschrift für Unternehmens- und Gesellschaftsrecht 1991, 17, 29; *Marco Ventoruzzo/Chiara Picciau*, in: Marco Ventoruzzo/Sebastian Mock (ed.), Market Abuse Regulation: Commentary and Annotated Guide, 2017, Article 7 mn. B.7.08; *Niamh Moloney*, EU Securities and Financial Markets Regulation, 3rd ed. 2014, VIII.6.1.1., p. 717; *Lars Klöhn*, "Insiderinformation – Entwicklung und Lehren nach 25 Jahren", in: Lars Klöhn/Sebastian Mock (ed.), Festschrift 25 Jahre WpHG: Entwicklung und Perspektiven des deutschen und europäischen Wertpapierhandelsrecht, 2019, p. 524, 524; *Stefan Grundmann,* in: Staub Handelsgesetzbuch Großkommentar, Bd. 11/2: Bankvertragsrecht – Investment Banking II, 5th ed. 2018, Part 6 mn. 334.

[106] *Klaus J. Hopt*, "Insiderrecht – Grundlagen Internationale Entwicklung, ökonomischer Hintergrund, offene Fragen", in: Lars Klöhn/Sebastian Moch (ed.), Festschrift 25 Jahre WpHG: Entwicklung und Perspektiven des deutschen und europäischen Wertpapierhandelsrecht, p. 503, 508; *Jennifer Payne*, "Disclosure of Inside Information", ECGI Law Working paper 422/2019, p. 15, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3244401; *Moloney* (fn. 105), VIII.6.1.1., p. 717; *Rüdiger Veil*, in: Rüdiger Veil (ed.), European Capital Markets Law, 2nd ed. 2017, § 13 mn. 14; *Carmine Di Noia/Mateja Milič/Paola Spatola*, "Issuers obligations under the new Market Abuse Regulation and the proposed ESMA

Article 14 of the MAR contains a reference to inside information, as defined in Article 7 of the MAR, in its prohibition of insider dealing (Article 14(a)), the recommendation to, or inducement of, others to engage in insider dealing (Article 14(b)) and unlawful disclosure of inside information (Article 14(c)), either directly (in the case of Article 14(c)) or at least indirectly (in the case of Article 14(a) and (b)). Article 17 of the MAR obligates issuers to disclose to the public, as soon as possible, any inside information which directly concerns them.

Pursuant to Article 7(1)(a) of the MAR, inside information is information of a precise nature, which has not been made public, and relating, directly or indirectly, to one or more issuers or to one or more financial instruments, and which, if it were made public, would be likely to have a significant effect on the prices of those financial instruments or on the price of related derivative financial instruments.

II. The Reasonable Investor as a Benchmark for Determining the Precise Nature of Information and the Likelihood of it Having a Significant Effect on Prices

In identifying whether, and if so, when ESG-related information may be considered to constitute inside information, and the potential implications of ESG-related information and changing investor preferences for this assessment, the degree of precision of the information in question and the likelihood of it having an effect on prices will be of particular importance.

1. A Starting Point: Recitals and Wording of the MAR

Pursuant to the first sentence of Article 7(2) of the MAR, information will be deemed to be of a *precise nature*[107] if it indicates a set of circumstances which exists or which may reasonably be expected to come into existence, or an event which has occurred or which may reasonably be expected to occur, where it is specific enough to enable a conclusion to be drawn as to the possible effect of that set of circumstances or event on the prices of the financial instruments or the related derivative financial instrument. At the same time, information which, if it were made

guideline regime: a brief overview", Journal of Banking Law and Banking 2014, 96, 97; *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.08; *Gregor Bachmann*, Das Europäische Insiderhandelsverbot, 2014, p. 10.

[107] For further details of the precise nature of the information, see *Klaus J. Hopt/Christoph Kumpan*, "Insider- und Ad-hoc-Publizitätsprobleme", in: Herbert Schimansky/Hermann-Josef Bunte/Hans-Jürgen Lwowski (ed.), Bankrechts-Handbuch, 5th ed. 2017, § 107 mn. 43 et seqq.; *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.31 et seqq.; *Jasper Lau Hansen*, "Issuers' duty to disclose inside information", ERA Forum 18 (2017), 21, 27 et seq.; *Veil* (fn. 106) mn. 31 et seqq.; *Moloney* (fn. 105), VIII.6.1.4., p. 720 et seq.; *Carsten Gerner-Beuerle,* in: Matthias Lehmann/Christoph/Kumpan (ed.), European Financial Services Law: Article-by-Article Commentary, 2019, Article 7 MAR mn. 18; *Lars Klöhn*, in: Lars Klöhn (ed.), MAR, 2018, Article 7 mn. 77 et seqq.; *Heinz-Dieter Assmann*, in: Heinz-Dieter Assmann/Uwe H. Schneider/Peter O. Mülbert (ed.), Wertpapierhandelsrecht, 7th ed., 2019, Article 7 of Regulation (EU) No 596/2014 mn. 8 et seqq.; *Christoph Kumpan/Robin Misterek*, in: Eberhard Schwark/Daniel Zimmer (ed.), Kapitalmarktrechts-Kommentar, 5th ed., 2020, Article 7 of Regulation (EU) No 596/2014 mn. 26 et seqq.

public, would be likely to have a significant effect on the prices of financial instruments or derivative financial instruments means information that a *reasonable investor* would be likely to use as part of the basis of his or her investment decisions (first sentence of Article 7(4) of the MAR).[108]

The impact of information on the price of the financial instrument in question is thus decisive for determining the existence of both of these elements (specificity and likelihood of an effect on prices), which in each case must be assessed from the perspective of a 'reasonable investor'.[109] Given that the characteristic of price specificity is of no independent significance, at any rate where the information is relevant to the price,[110] the following section focuses on whether and, if so, when ESG-related information will be likely to affect prices from the perspective of a 'reasonable investor'.

In that regard, recital 14 of the MAR states as follows: "Reasonable investors base their investment decisions on information already available to them, that is to say, on *ex ante* available information. Therefore, the question whether, in making an investment decision, a reasonable investor would be likely to take into account a particular piece of information should be appraised on the basis of the *ex ante* available information. Such an assessment has to take into consideration the anticipated impact of the information in light of the totality of the related issuer's activity, the reliability of the source of information and any other market variables likely to affect the financial instruments, the related spot commodity contracts, or the auctioned products based on the emission allowances in the given circumstances." Recital 15 states that "ex post information can be used to check the presumption that the *ex ante* information was price sensitive, but should not be used to take action against persons who drew reasonable conclusions from *ex ante* information available to them".

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108 For further details of the significant potential for impacting share prices pursuant to Article 7 of the MAR, see *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.60 et seqq.; *Jasper Lau Hansen*, "Market Abuse Case Law – Where DoWe StandWith MAR?", European Company and Financial Law Review 2017, 367, 385 et seqq.; *Assmann* (fn. 107), Article 7 of Regulation (EU) No. 596/2014 mn. 78 et seqq.; *Klöhn* (fn. 107), Article 7 mn. 156 et seqq.; *Hopt/Kumpan* (fn. 107), § 107 mn. 54 et seqq.; *Michael Brellochs*, "Insiderrecht", in: Mathias Habersack/Peter O. Mülbert/Michael Schlitt (ed.), Handbuch der Kapitalmarktinformation, 3rd ed., 2020, § 1 mn. 80 et seqq.; *Andreas Meyer*, "Insiderrecht", in: Siegfried Kümpel/Peter O. Mülbert/Andreas Früh/Thorsten Seyfried (ed.), Bank- und Kapitalmarktrecht, 5th ed., 2019, mn. 12.187 et seqq.

109 *Hopt/Kumpan* (fn. 107), § 107 mn. 43; cf. *Gerner-Beuerle* (fn. 107), Article 7 MAR mn. 18 for the precise nature of the information.

110 *Klöhn* (fn. 107), Article 7 mn. 82.

2. Divergent Conceptions in Statements of National Competent Authorities, in the Case Law and in the Legal Literature

National competent authorities, the legal literature and national courts have thus far defined the concept of the reasonable investor quite differently.[111] However, there is agreement that it is a normative legal concept[112] and that it must be determined objectively but with due regard to the particularities of the individual case.[113] In other respects, opinions differ, sometimes quite substantially.[114] To date, the divergent conceptions particularly disagree as to whether and to what extent the 'reasonable investor-concept' should take irrational investor behaviour into account.[115]

a) The Reasonable Investor as the Average Investor

The arguably predominant view considers the reasonable investor to be an average individual.[116] A more detailed depiction of this average individual usually does not include the retail investor who is unfamiliar with the stock exchange, but rather an investor who possesses an average degree of expertise in handling the financial instrument in question, who is familiar with the market conditions[117] and who is interested in maximizing his, her or its financial

[111] See ESMA Securities and Markets Stakeholder Group (SMSG), SMSG Position Paper Regarding ESMA's Work on MAR Level 3-Measure, ESMA/2015/SMSG/025, para. 33 et seq. Overview of the different positions in *Hartmut Krause/Michael Brellochs*, "Insider trading and the disclosure of inside information after Geltl v Daimler – A comparative analysis of the ECJ decision in the Geltl v Daimler case with a view to the future European Market Abuse Regulation", Capital Markets Law Journal 8 (2013), 283, 291 et seqq. (with particular regard to protracted processes); *Katja Langenbucher*, "In Brüssel nichts Neues? – Der "verständige Anleger" in der Marktmissbrauchsverordnung", Die Aktiengesellschaft 2016, 417; *Christoph Kumpan/Robin Misterek*, "Der verständige Anleger in der Marktmissbrauchsverordnung", Zeitschrift für das gesamte Handels- und Wirtschaftsrecht 184 (2020), 180, 189 et seqq.

[112] See *Brellochs* (fn. 108), § 1 mn. 83; *Klöhn* (fn. 107), Article 7 mn. 268.

[113] Financial Conduct Authority (FCA), Handbook, DTR 2: Disclosure and control of inside information by issuers, Section 2.2.4 et seqq. (September 2020); *Ian Charles Hannam v The Financial Conduct Authority*, 27 May 2014, [2014] UKUT 0233 (TCC), para. 101; *Brellochs* (fn.103), § 1 mn. 83; cf. also *Peter O. Mülbert*, in: Heinz-Dieter Assmann/Uwe H. Schneider/Peter O. Mülbert, Wertpapierhandelsrecht, 7th ed., 2019, Article 12 of Regulation (EU) No. 596/2014 mn. 65. Cf. with regard to the materiality test under US Securities Law, *TSC Indus. v. Northway*, 426 U.S. 438 (1976).

[114] See *supra* C.I.2.a) and b).

[115] Cf. ESMA SMSG (fn. 111), para. 34; *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.63 et seqq.; *Veil* (fn. 106) mn. 44 et seq.

[116] *Moloney* (fn. 105), VIII.6.1.6., p. 722: "Article 7(4), which is based on the 2003 Commission Definitions and Disclosure Directive adopts a micro 'reasonable investor' model, rather than a macro market impact model."; cf. *Ian Charles Hannam v The Financial Conduct Authority*, 27 May 2014, [2014] UKUT 0233 (TCC), para. 101.

[117] Bundesgerichtshof (German Federal Supreme Court), 13 December 2011 – XI ZR 51/10, Neue Zeitschrift für Gesellschaftsrecht 2012, 263 mn. 41; Oberlandesgericht (Higher Regional Court) Stuttgart, 22 April 2009 – 20 Kap 1/08, Neue Zeitschrift für Gesellschaftsrecht 2009, 624, 628; OLG Düsseldorf, 6 July 2004 – III-5 Ss 2/04 – 13/04 I, AG 2005, 44, 45; *Ian Charles Hannam v The Financial Conduct Authority*, 27 May 2014, [2014] UKUT 0233 (TCC), para. 101; *Assmann* (fn. 107), Article 7 VO No. 596/2014 mn. 84; *Meyer* (fn. 108), mn. 12.195.

returns.[118] The majority of the proponents of this view describe such an investor as a *rational* market participant.[119]

However, there is no agreement as to whether such rational market participants will also take irrational market behaviour on the part of others into account. Some commentators argue that the concept of the reasonable investor must at least be extended to include speculative investors who simply wish to take advantage of a short-term price movement.[120] Reasonable investors will also take predictable irrational behaviour of other market participants into account.[121] In contrast, other commentators put forward valid arguments as to why the 'reasonable investor' should not have regard to any such irrational market behaviour.[122]

b) The Reasonable Investor as a Reflection of the Market as a Whole

The opposite view, which is currently gaining ground, describes the reasonable investor as a reflection of the market as a whole and thus as a collective entity.[123] The decisive characteristic is therefore not that of an average investor who can be defined in any way, but the (hypothetical) market reaction as such.[124] However, the proponents of this view do not agree on a means of defining this collective entity in greater detail.

Some commentators advocate for the relevance of model assumptions to be taken into account and define the reasonable investor as the embodiment of the ECMH.[125] They tend to take only information into account which relates to the economic opportunities and risks associated with the financial instrument in question and thus to the fundamental value of the issuer's

[118] FCA (fn. 113), Section 2.2.5: "… the likelihood that a reasonable investor will make investment decisions relating to the relevant *financial instrument* to maximise his economic self interest"; cf. *Ian Charles Hannam v The Financial Conduct Authority*, 27 May 2014, [2014] UKUT 0233 (TCC), para. 101.
[119] Cf. Committee of European Securities Regulation (CESR), "CESR's Advice on Level 2 Implementing Measures for the proposed Market Abuse Directive, December 2002, CESR/02-089d, p. 10 mn. 27 with Fn. 1; OLG Stuttgart, 22 April 2009 – 20 Kap 1/08, (fn. 117), 628; *Ian Charles Hannam v The Financial Conduct Authority*, 27 May 2014, [2014] UKUT 0233 (TCC), para. 101; *Assmann* (fn. 107), Article 7 of Regulation (EU) No of Regulation (EU) No. 596/2014 mn. 84.
[120] BaFin, Art. 17 MAR – Veröffentlichung von Insiderinformationen (FAQs), dated 31 January 2019, III.5.b), p. 8, available at: https://www.lw.com/admin/Upload/Documents/dl_faq_mar_art_17_Ad-hoc.pdf-jsessionid_BF51BA21C4A454DA7590CD085FB6FCF1.2_cid381.pdf.
[121] *Klaus Ulrich Schmolke*, "Die Haftung für fehlerhafte Sekundärmarktinformation nach dem „IKB"-Urteil des BGH", Zeitschrift für Bankrecht und Bankwirtschaft/Journal for Banking Law and Banking 2012, 165, 172 et seq.
[122] Cf. *supra* C.IV.2.
[123] *Kumpan/Misterek* (fn. 111), 193.
[124] *Kumpan/Misterek* (fn. 111), 193.
[125] *Klöhn* (fn. 107), Article 7 mn. 271 et seqq.; *Hopt/Kumpan* (fn. 107), § 107 mn. 55; *Ventoruzzo/Picciau* (fn. 104) Article 7 mn. B.7.63; *Martin Thelen*, "Schlechte Post in eigener Sache: Die Pflicht des Emittenten zur Ad-hoc-Mitteilung potentieller Gesetzesverstöße", Zeitschrift für das gesamte Handels- und Wirtschaftsrecht 182 (2018), 62, 64 et seq., 71.

securities.[126] As a corollary, the actual *ex post* share price movement should not be of any relevance.[127]

In contrast, other authors are inclined to (also) include real market events, the effects of which must be predicted *ex ante*.[128] This approach is not based on any model assumptions regarding the potential of certain information to impact share prices. Rather, it aims at forecasting the actual share price movement, for example by using event studies.[129] Given that irrational market behaviour can in some cases be predicted, it may, in such cases, be deemed relevant.

III. Fundamental Value-Related ESG-Information

As a normative matter, where ESG-related information has an impact on the fundamental value of the financial instrument in question, *i.e.* where it affects the amount of the future cash flows or the relevant discount factor,[130] the divergent opinions regarding the reasonable investor[131] will coincide at this juncture: that the information should be taken into account.

IV. Non-Financial Investor Preferences and the Inside Information Regime

1. The Legal Perspective: Determining the Normative Characteristics of the Reasonable Investor

To the extent that the change in investor preferences described in the foregoing[132] leads to a *predictable* reaction of prices to ESG-related information, *without* the degree of such sensitivity being justified by the impact of the underlying circumstances on the *fundamental value* of the financial instrument, there are significant differences between those approaches which are based on idealised model assumptions[133] and those which take account of (predicted) real

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[126] *Klöhn* (fn. 107), Article 7 mn. 284 et seqq.; *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.63 et seq.; *Hopt/Kumpan* (fn. 107), § 107 mn. 55; *Kumpan/Misterek* (fn. 111), 214 et seqq.; *Kumpan/Misterek* (fn. 111), Article 7 of Regulation (EU) No 596/2014 mn. 136 et seqq. Trading-related information is of no relevance to fundamental values, although, according to the prevailing opinion, such information can also constitute inside information within the meaning of Article 7(1) of the MAR (see Article 7(1)(d) of the MAR; see only *Brellochs* (fn. 108) § 1 mn. 90 et seq.; *Klöhn* (fn. 107), Article 7 mn. 290). However, the ESG-related information of interest here does not constitute trading-related information in accordance with the common understanding of this term, as the latter typically confers an advantage in the form of information about the specific order situation ("order-acceptance") (see *Klöhn* (fn. 107), Article 7 mn. 300). In this context, however, we are dealing with a market valuation of a financial instrument which deviates from the classic fundamental value.

[127] *Klöhn* takes a different view, see *Klöhn* (fn. 107), Article 7 mn. 249. According to Klöhn, the actual price movement in an efficient market (!) does indicate that the *ex ante* information was price sensitive. Therefore, for him, the crucial question is whether the market in question was an efficient one (mn. 250).

[128] For an approach along these lines, see Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), Emittentenleitfaden, Modul C, dated 25 March 2020, I.2.1.4.1., p. 12; cf. *Langenbucher* (fn. 111), 419 et seqq.

[129] Cf. *Langenbucher* (fn. 111), 420.

[130] *Supra* B.II.1.

[131] *Supra* C.I.2.a) and b).

[132] *Supra* B.II.2.

[133] *Supra* fn. 125 et seq.

market behaviour.[134] Indeed, commonly used models, including the ECMH and the CAPM, proceed on the assumption that rational investors take only fundamental value-related information into account. Such idealized model investors would not change their investment behaviour on the basis of ESG-related information which had no impact on the fundamental value of the financial instrument in question.

Therefore, from a legal point of view, the crucial question is whether the MAR implicitly prescribes the adoption of certain model assumptions, in particular the assumptions on which the ECMH is based, and thus predetermines the outcome in a manner which is binding on the legal practitioner, the supervisory authorities and the courts. Were this the case, non-financial investor preferences would not be of any relevance to the prohibition on insider dealing and the obligation to publicly disclose inside information, and ESG-related information would necessarily be relevant only where it affects future cash flows or the discount factor.

2. The Irrelevance of Irrational Investor Behaviour as an Analogous Case?

The discussion as to whether irrational investor behaviour should be taken into account provides some instructive insights. On closer inspection, the arguments in favour of the sole relevance of fundamental value-related information, which are quite convincing in that context,[135] scarcely touch on the issue which is of interest here, i.e. whether the shift in investor preferences to include non-financial considerations may be deemed to be of significance for the prohibition on insider dealing and the obligation to publicly disclose inside information. The following discussion addresses this aspect in greater detail.

a) The Irrelevance of the Rationality Argument

Firstly, mere reference to the rationality of the reasonable investor does not constitute a compelling line of argument with regard to the issue at hand.[136] The impact of ESG factors will depend on a critical mass of real-life investors with an ESG-preference, as opposed to model investors, aligning their supply and demand behaviour with criteria other than the maximization of financial returns. The rationality of such investors is not contested, on the grounds that, in order for an investment decision deemed to be rational, that decision must merely be based on

[134] *Supra* fn. 121, 128.
[135] In particular, *Klöhn* (fn. 107), Article 7 mn. 267 et seqq.; *Kumpan/Misterek* (fn. 111), 203 et seqq.; *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.63 et seq.
[136] With regard to this line of argument in connection with irrational investor behaviour, see *Klöhn* (fn. 107), Article 7 mn. 274; *Kumpan/Misterek* (fn. 111), 207 et seqq.

factors which are consistent, i.e. free of contradictions, future-oriented[137], transitive[138], invariant and independent of irrelevant alternatives.[139]

b) The Purpose of the Prohibition on Insider Dealing and the Obligation to Publicly Disclose Inside Information

The underlying purpose of both the prohibition on insider dealing and the obligation to publicly disclose inside information does not argue against the consideration of ESG-related information – in contrast to the situation as regards irrational investor behaviour.[140]

Taking into account irrational and purely speculative investor behaviour when determining the information to be published pursuant to Article 17 of the MAR could potentially result in fundamentally unjustified price distortions.[141] The purpose of Article 17 of the MAR, which is to protect the integrity and transparency of the market, would be undermined were companies to be obligated to publish such information.[142] However, this does not hold equally true for ESG-related information which directly affects the issuer. While the price movements resulting from the disclosure of ESG-related information may not be fundamentally justified in the neo-classical sense, a market which reacts to such information in line with changing investor preferences will not necessarily be one of lesser efficiency, integrity or transparency.

The purpose of the prohibition on insider dealing provides an even stronger argument in favour of the consideration of ESG-related information. The prohibition aims at preventing the gaining of special advantages through arbitrage opportunities with a view to preventing a loss of investor confidence, which could deprive the market of liquidity and compromise its efficiency (see recital 23 of the MAR).[143] If, however, ESG-related information concerning an issuer

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137 Fundamentally, *Hal R. Arkes/Catherine Blumer*, “The psychology of sunk costs”, 35 Organizational Behaviour & Human Decision Processes (1985), 124.

138 *Donald Davidson/J. C. C. McKinsey/Patrick Suppes*, “Outlines of a formal theory of value”, 22 Philosophy of Science (1955), 140.

139 See *Robyn M. Dawes*, “Rational Choice in an Uncertain World”, 1988, p. 64 et seqq.; *Hans-Bernd Schäfer/Clas Ott*, Lehrbuch der ökonomischen Analyse des Zivilrechts, 5th ed., 2012, p. 97; on the foundations and history of prescriptive decision theory; *Ward Edwards/Ralph F. Miles/Detlof von Winterfeldt*, Advances in decision analysis – from foundations to applications, 2007, p. 13 et seqq. In the context of ESG investments, see *Köndgen* (fn. 2), p. 671, 681 et seq.

140 Cf. *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.63 et seq.; *Klöhn* (fn. 107), Article 7 mn. 275 and *Kumpan/Misterek* (fn. 111), 207 et seqq.

141 Cf. *Klöhn* (fn. 107), Article 7 mn. 275 and *Kumpan/Misterek* (fn. 111), 207.

142 *Wolf-Georg Ringe,* in: Matthias Lehmann/Christoph/Kumpan (ed.), European Financial Services Law: Article-by-Article Commentary, 2019, Article 17 MAR mn. 3; *Klöhn* (fn. 107), Article 7 mn. 276. Besides, underlying purpose of the issuer disclosure obligation is the prevention of insider dealing.

143 *John Armour/Dan Awrey/Paul Davies/Luca Enriques/Jeffrey N. Gordon/Colin Meyer/Jennifer Payne,* Principles of Financial Regulation, 2016, 9.2.2. (p. 183 et seqq.); *Kumpan/Misterek* (fn. 111), 209; *Grundmann* (fn. 105), mn. 337 et seqq.; with regard to investor confidence, see *Peter O. Mülbert/Alexander Sajnovits*, The Element of Trust in Financial Markets Law, German Law Journal 17 (2017), 1.

would be likely to have a considerable impact on the share price because it is likely to influence the supply and demand behaviour of a critical mass of investors, an insider will have arbitrage opportunities arising from his or her possession of this information, the exploitation of which is likely to undermine market confidence.

c) Legal Certainty and Practicability of the Issuer Disclosure Regime

Moreover, the aspects of legal certainty and practicability[144] cannot be invoked as arguments against the relevance of ESG-related information which has no impact on fundamental value. Given that we are concerned with a critical mass of real-life investors with ESG-preferences, and are not calling into question the rationality of their decisions, it is, in principle, also possible to make predictions about the impact of ESG-related information on the development of share prices and, therefore, to create models which take account of such changing preferences.[145]

d) Function-Based Considerations

Finally, function-based considerations – according to which the primary beneficiaries of both the prohibition on insider dealing and the obligation to publicly disclose inside information are exclusively fundamental value-oriented information traders[146] – are not compelling in the rising ESG era. Professional investors are increasingly exploiting the potential to achieve positive alphas by means of ESG-compliant investments.[147] These investors are information traders. Therefore, at least at first glance, no argument can be discerned in favour of them being deemed less worthy of protection.

3. Preliminary Conclusion and Implications

In the light of the foregoing discussion, and assuming a critical mass of real-life investors with ESG-preferences, one cannot dismiss the relevance of ESG-related information to the inside

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[144] Cf. *Klöhn* (fn. 107), Article 7 mn. 278; *Ventoruzzo/Picciau* (fn. 105) Article 7 mn. B.7.68 et seq. in the context of irrational behaviour.

[145] Cf. *supra* B.II.2.

[146] *Klöhn* (fn. 107), Article 7 mn. 279.

[147] See, in particular, BlackRock (fn. 2); furthermore, e. g., UBS recently made sustainable investments its preferred solution for wealth management (https://www.ubs.com/microsites/sustainable-investing/en.html). Without question, any strategy based on the ESG channels (B.II.1.) or changing investor preferences (B.II.2.) described herein will be based on the assumption that current market prices do not yet reflect those considerations. However, this will be the case with any stock picking strategy. Apart from this, ESG investing can also be used via the systemic risk channel to hedge entire portfolios against systematic shocks and tail risks (cf. *Coffee* (fn. 2), p. 12). However, the issue of whether it may be capable of outperforming the market remains a highly controversial one. See, e. g., *Robert Armstrong*, "The dubious appeal of ESG investing is for dupes only", FT-online 23 August 2020, available at: https://www.ft.com/content/e9f00cb2-3cd8-499e-9e8a-dd837f94657e. Indeed, based on the foregoing, a case can also be made in favour of investment in companies with a poor ESG profile also being a worthwhile endeavour. Were the cost of capital of companies with poor ESG profile to rise, they would be called upon to pay out higher returns. Cf. *Schanzenbach/Sitkoff* (fn. 2), 381, 398.

information regime by referring to the arguments put forward against the consideration of irrational investor behaviour.[148]

Furthermore, it is rather doubtful that the MAR subscribes to particular economic model (ECMH) and its assumptions. The legislative history of the MAR[149] and the incorporation therein of the wording of comparable provisions of US law[150] are not necessarily indicative of a wholesale adoption of either the concepts underlying said provisions or the interpretation thereof by the US courts or US legal scholarship,[151] nor do the relevant legislative materials contain any indication of the existence of any such intention on the part of the EU legislature. Moreover, recital 15 of the MAR considers the actual price movement to be an indication in favour of the presumption that the *ex ante* information was price sensitive. However, in the case of sole reliance on model assumptions for the determination of price sensitivity, the actual price movement should not be viewed as being of any relevance. Finally, reliance on the development or adoption of more or less reliable (economic) model assumptions touches upon the issue of whether, when and how economic models should be transposed into law, which, as a general matter, remains a highly controversial one.[152]

Our inclination to acknowledge the relevance of ESG preferences of a critical mass of real-life investors to the inside information regime notwithstanding, the intense debate regarding the precise depiction of the 'reasonable investor' indicates that the relevance of ESG-related information to said regime is by no means clear. In light of these uncertainties and given its efforts to promote sustainable finance,[153] the EU legislature would be well advised to further specify the concept of inside information with a particular focus on ESG-related information.[154]

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[148] *Supra* C.IV.2.

[149] With regard to the consideration of the legislative history, cf. CJEU, CJEU Case C-628/13 para. 37: "It should also be noted in that context that the *travaux préparatoires* for Directive 2003/124 disclose that a reference to the possibility of drawing a conclusion as regards the 'direction' of the effect of the information on the price of the financial instruments concerned, made in the version, subject to public consultation, of technical advice CESR/02-089d issued in December 2002 by the Committee of European Securities Regulators (CESR), for the European Commission and entitled 'CESR's Advice on Level 2 Implementing Measures for the proposed Market Abuse Directive', was later deleted precisely in order to avoid such a reference being used as a pretext for not making information public".

[150] *Klöhn* (fn. 107), Article 7 mn. 275; *Gerner-Beuerle* (fn. 107), Article 7 MAR mn. 25; *Guido Ferrarini*, "The European Market Abuse Directive", Common Market Law Review 41 (2004), 711, 721.

[151] This is arguably also the opinion held by *Moloney* (fn. 105), VIII.6.1.6.

[152] For a critical view in this regard, see, e.g., *Fritz Rittner*, "Das Modell des homo oeconomicus und die Jurisprudenz", JuristenZeitung 2005, 668.

[153] *Supra* B.I.2.b).

[154] It is therefore somewhat surprising that ESMA, in its recently published MAR review, argues against the making of any changes to the definition of 'inside information'.

D. Outlook

The rising ESG era will pose great challenges for financial market research and will also impact European capital market law, company law[155] and corporate governance[156], in particular.

As regards company law, it should be pointed out – by way of illustration – that, under the traditional concept of shareholder value, an increase in the share price which is sustainable from the company's point of view can only be achieved by maximizing its fundamental value. It is questionable whether this will or should continue to be the case in the future in view of the developments described in the foregoing. Can shareholder interest really be equated with the maximization of the fundamental value of the shares of a company if a substantial proportion of its shareholders are no longer investing primarily with the aim of maximizing financial returns, but rather in pursuit of other, ESG-related objectives as well?[157] Even if the concept of the maximization of the share price does retain its relevance, investment decisions may also have to take account of the fact that the share price may change in response to changing investor preferences, irrespective of whether this has any impact on future cash flows or the discount factor – to name just one of the challenges to be faced going forward.

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[155] Cf. *Coffee* (fn. 2), p. 36 et seq.; *Condon* (fn. 25), p. 1, 8 et seqq., 65 et seqq.; *Barzuza/Curtis/Webber* (fn. 10), p. 60 et seqq.; *Chiara Mosca/Chiara Picciau*, "Making Non-Financial Information Count: Accountability and Materiality in Sustainable Reporting", Bocconi Legal Studies Research Paper No. 3536460, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3536460; *Mathias Habersack*, "Gemeinwohlbindung und Unternehmensrecht"; AcP 220 (2020), Heft 5; *Christoph Andreas Weber/Benedict Kebekus*, "Diversifizierung und Corporate Governance", Zeitschrift für das gesamte Handels- und Wirtschaftsrecht 184 (2020), 324, 355; *Jochen Vetter*, "Geschäftsleiterpflichten zwischen Legalität und Legitimität – Muss sich Ethik lohnen? –", Zeitschrift für Unternehmens- und Gesellschaftsrecht 2018, 338, 360 et seqq.

[156] Cf. European Commission, 'Study on directors' duties and sustainable corporate governance: Final Report, prepared by EY for the European Commission DG Justice and Consumers, July 2020, available at: https://op.europa.eu/de/publication-detail/-/publication/e47928a2-d20b-11ea-adf7-01aa75ed71a1/language-en. For a critical view, see the following posts in the Oxford Business Law Blog EC Corporate Governance Initiative Series: *Alexander Bassen/Kerstin Lopatta/Wolf-Georg Ringe*, "The EU Sustainable Corporate Governance Initiative—room for improvement", Oxford Business Law Blog of 15 October 2020, available at: https://www.law.ox.ac.uk/business-law-blog/blog/2020/10/ec-corporate-governance-initiative-series-eu-sustainable-corporate; The European Company Law Experts Group, "A Critique of the Study on Directors' Duties and Sustainable Corporate Governance Prepared by Ernst & Young for the European Commission", Oxford Business Law Blog of 14 October 2020, available at: https://www.law.ox.ac.uk/business-law-blog/blog/2020/10/ec-corporate-governance-initiative-series-critique-study-directors; *Marcello Bianchi/Mateja Milič*, "European Companies are Short-Term Oriented: The Unconvincing Analysis and Conclusions of the Ernst & Young Study", Oxford Business Law Blog of 13 October 2020, available at: https://www.law.ox.ac.uk/business-law-blog/blog/2020/10/ec-corporate-governance-initiative-series-european-companies-are; Mark J. Roe/Holger Spamann/Jesse Fried/Charles Wang, "The European Commission's Sustainable Corporate Governance Report: A Critique", Oxford Business Law Blog of 20 October 2020, available at: https://www.law.ox.ac.uk/business-law-blog/blog/2020/10/ec-corporate-governance-initiative-series-european-commissions.

[157] Cf. *Oliver Hart/Luigi Zingales*, "Companies Should Maximize Shareholder Welfare Not Market Value", Journal of Law, Finance and Accounting 2017, 247; *Eleonora Broccardo/Oliver Hart/Luigi Zingales*, "Exit vs. Voice", ECGI Finance Working Paper No. 694/2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3671918. The latter paper has been presented by *Oliver Hart* at the ECGI 2020 Wallenberg Lecture.

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