

What Constitutes Inside Information for Corporate Bond Issuers?



by

ERIK LIDMAN*

The definition of inside information in the EU Market abuse regulation is a well-discussed (but nevertheless difficult) topic. However, almost all case law and literature relate to what constitutes inside information with regards to equities, and not most other types of securities. The topic of this article is to analyse what constitutes inside information for a corporate bond issuer according to Article 7 in the EU Market Abuse Regulation, and a bond issuers duty to disclose said information according to Article 17. The article presents five important factors generally influencing the pricing of bonds as financial instruments: the terms of the bond, credit risk (broken down into probability of default and loss given default), events affecting the economic rights of bondholders such as mandatory redemption, mandatory exchange of securities and changes in bond terms (call risk), interest rate risk and liquidity risk. Based on these factors, a number of concrete examples of situations when inside information may generally be assumed to arise is then discussed, namely in the event of changes in credit risk, changes in credit ratings, bond buy-backs and offers of voluntary exchanges of securities, mandatory exchanges of securities, changes of bond terms, breach of the terms, changes in bond seniority, and finally changes in ownership and delisting. Hopefully, the article contributes to clarifying the application of MAR for bond issuers, both in terms of how Articles 7 and 17 should generally be applied and understood, and in terms of how the rules should be applied in a number of specific situations as a starting point. The article also shows that the requirement for a bond issuer to disclose inside information is likely more far-reaching than is sometimes assumed.

Table of Contents

ECFR 2025, 214–240

1. Introduction	215
2. Overview of Articles 7 and 17 of MAR	217
2.1. Article 7	217
2.2. Article 17 and the duty to disclose inside information	225
3. The difference between equity and bond price formation and what affects bond prices	226
3.1. What affects the price formation of equities	226
3.2. What affects the price formation of corporate bonds	227

* Professor of Company Law at the university of Stockholm and director of the Swedish Corporate Governance Institute.

4. Information that would typically be considered inside information for a corporate bond issuer 230

4.1. Changes in credit risk 230

4.2. Changes in credit ratings 232

4.3. Buy-backs and voluntary security exchange offers 235

4.4. Mandatory security exchanges 236

4.5. Changes in terms and breaches 237

4.6. Actions affecting seniority 238

4.7. Changes of control and delisting 238

5. Summary 239

1. Introduction

An issuer whose corporate bonds¹ are admitted to trading on a regulated market or a multilateral trading facility is required to disclose inside information under Articles 7 and 17 of the EU Market Abuse Regulation (MAR).² However, the disclosure obligation, and in particular the assessment of what information should be considered inside information, is notoriously complex. In addition, virtually all case law and literature regarding inside information and MAR relate to issuers of *equity*, and not bonds or other securities.³ There are good reasons to believe that the questions arising with regards to MAR, in particular what constitutes inside information, differs in the equity and corporate bond markets, and given the size and importance of the European corpo-

1 In the article, the terms "corporate bonds" and "bonds" are used synonymously for the sake of readability.

2 Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation).

3 See for example Veil (ed.) (2017), *European Capital Markets Law*, Hart Publishing, Klöhn (2018), *Marktmissbrauchsverordnung: Verordnung (EU) Nr. 596/2014 über Marktmissbrauch*, C.H. Beck, Lehmann Kumpmann (eds.), *European Financial Services Law* (C.H. Beck), 2019, Swan/Virgo, *Market Abuse Regulation*, Oxford University press second edition, 2019, Kalss/Oppitz/Torggler/Winner, *EU Market Abuse Regulation – A Commentary on Regulation (EU) No 596/2014*, 202, Edward Elgar, and Ventoruzzo/Mock (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, Oxford University Press second edition, 2021. The recommendations and guidelines that have been issued in relation to disclosure of inside information have also focused on issuers of shares. See for instance CESR's Advice on Level 2 Implementing Measures for the Proposed Market Abuse Directive (CESR/02-089d), CESR's Market Abuse Directive Level 3 – second set of CESR guidance and information on the common operation of the Directive to the market (CESR/06-562b), Level 3 – Third set of CESR guidance and information on the common operation of the Directive to the market (CESR/09-219), and Final Report – Guidelines on the Market Abuse Regulation – market soundings and delay of disclosure of inside information (ESMA/2016/1130).

rate bond markets, the lack of guidance for corporate bond issuers and investors is problematic. This article seeks to address this problem by providing an analysis of what constitutes inside information for a corporate bond issuer according to Article 7 of MAR, both at a general level and in a number of practically important situations, with a focus on bond issuers' duty to disclose said information according to Article 17.

A premise of the analysis is that the issuer *has listed bonds, but no listed shares*, and it is such an issuer that is referred to here as a "bond issuer". If an issuer has both shares and bonds admitted to trading, the problem regarding disclosure under MAR is less prevalent, since the share price is normally (although not always) more sensitive than that of the bonds, and the information that constitutes inside information for a bond issuer is generally a subset of the information that would constitute inside information if the issuer also has listed shares. However, as is noted in the article, this is not always the case.

The structure of the article is the following. Section 2 of the paper briefly, and for the purposes of this article, describes the definition of inside information in Article 7 and the disclosure obligation in Article 17 of MAR.⁴ Section 3 then discusses the factors that generally affect bond pricing, which are of fundamental importance in applying Article 7 of MAR in relation to corporate bonds. Since virtually all the literature on inside information and MAR focuses on issuers of equity, the section begins by contrasting bond pricing with pricing of equity instruments, highlighting the differences between the instruments with regards to price formation. Section 4 then deals with a number of concrete situations where inside information would typically arise in the corporate bond market. The issues dealt with there are of course not intended to be exhaustive, but are chosen because they illustrate a number of situations that are theoretically and practically relevant for a corporate bond issuer. Section 5 summarises the article and presents some concluding reflections.

⁴ For more expansive descriptions and analyses in English, see for instance Veil (ed.), *European Capital Markets Law*, Hart Publishing, 2017; Edward Elgar/Ventoruzzo/Mock (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, 2021, Oxford University Press second edition, Kalss/Oppitz/Torggler/Winner, *EU Market Abuse Regulation – A Commentary on Regulation (EU) No 596/2014*, 2021.

2. Overview of Articles 7 and 17 of MAR

2.1. Article 7

Article 7.1 of MAR defines inside information as information (*italics added*) “of a *precise nature*, which has *not been made public, 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”. Two of the elements *precise nature* and *significant price effect*, are further qualified in two auxiliary rules (Article 7.2 and 7.4). Article 7.1 thus contains four cumulative elements – precise nature, non-public information, directly or indirectly related to the issuer, and significant price impact – which determines whether a piece of information constitutes inside information. These elements are addressed in the sections below, focusing on the precise nature and significant price impact elements, which are the key elements in the subsequent analysis of what information can be assumed to constitute inside information for bond issuers.

2.1.1. “Precise nature”

The first element that must be fulfilled for information to be considered inside information is that the information is of a “precise nature”. Guidance on how to understand this element can be found in Article 7.2 of MAR, which states that information is of a precise nature 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, the related spot commodity contracts, or the auctioned products based on the emission allowances. In this respect in the case of a protracted process that is intended to bring about, or that results in, particular circumstances or a particular event, those future circumstances or that future event, and also the intermediate steps of that process which are connected with bringing about or resulting in those future circumstances or that future event, may be deemed to be precise information.

The meaning of “precise nature” has been discussed in some detail.⁵ The element was included in the definition of inside information in the directive that

5 See for instance Veil (ed.), *European Capital Markets Law*, Hart Publishing, 2017, p. 202 et seq, Lehmann and Kumpmann (eds.), *European Financial Services Law*, 2019, C.H. Beck, p. 677 et seq, Swan/Virgo, *Market Abuse Regulation*, Oxford University

preceded MAR, MAD I (Directive 2003/6/EC). Building on the MAD I definition, the CJEU's *Geltl*-case made some clarifications regarding the meaning of "precise nature", which were later incorporated into MAR.⁶ In *Geltl*, the Court states that there must be "realistic prospects" of a future event occurring in order for the information about it to be of "precise nature", and that steps in a process that takes place over time can in themselves fulfil the specificity requirement.⁷ As subsequently interpreted by the Court in the *Lafonta*-case, the specificity requirement does not presuppose that the information in question can be assumed with a sufficient degree of probability to have a potential impact in a certain direction on the share price.⁸ Thus, information can be of "precise nature" even if no conclusions can be drawn from the information about the direction of the price effect.⁹ As regards the nature of the information, the Court in *Lafonta* only exclude "information that is vague or general, from which it is impossible to draw a conclusion as regards its possible effect on the prices of the financial instruments concerned" from the concept of inside information.¹⁰ In light of the Court's rulings in *Geltl* and *Lafonta*, the "precise nature" element cannot be considered a particularly high requirement.

press second edition, 2019, p. 43 et seq, *Ventoruzzo/Mock* (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, Oxford University Press second edition, 2019, p. 275 et seq. and *Kalss/Oppitz/Torggler/Winner*, *EU Market Abuse Regulation – A Commentary on Regulation (EU) No 596/2014*, Edward Elgar, 2021, p. 65 et seq.

6 See *Geltl v. Daimler AG* (C-19/11).

7 See now Articles 7.2 and 7.3 of MAR and recital 16 in the preamble to MAR. It would be going too far to discuss the nuances of the assessment here, but it can be added that the doctrine further divides the test into a *reasonable expectation test* and a *specificity test*. The first test aims to determine whether an event is reasonably likely to occur or whether circumstances are reasonably likely to exist, and the second aims to determine whether the information is sufficiently specific to allow conclusions to be drawn as to the potential price effect of the information. It can also be noted that Article 7 makes a distinction between circumstances and events. The CJEU has stated that the terms are to be interpreted in accordance with their everyday meaning (see *Geltl v. Daimler*, paragraph 30). The distinction between circumstance and event is probably of less practical importance, however, compare *Ventoruzzo/Mock* (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, Oxford University Press second edition. 2021, p. 277 et seq.

8 *Lafonta v AMF* (C-628/13), see paragraph 36 in particular.

9 Dubbed "the total mix standard", see *Hansen, Say When: When Must an Issuer Disclose Inside Information?*, Nordic & European Company Law Working Paper nr 16–03, 2016, p. 16, with reference to *Industries, Inc. v. Northway, Inc.*, 426 U.S. 438–449 (1976) from the US Supreme Court (which states, inter alia: "[...] there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available").

10 See paragraph 31 in *Lafonta*.

In practice, the requirement only means that an initial screening is made of information whose nature is such that it is not possible to draw conclusions about its price effect and that the information therefore, for that reason alone, does not constitute inside information.¹¹ The function of the element is thus to provide a methodological simplification tool, in that in some cases the interpretative operation of Article 7 can be cancelled at an early stage, with the conclusion that certain information does not constitute inside information since it lacks specificity.

2.1.2. “Not been made public”

In order for information to constitute inside information, Article 7.1 assumes, of course, that the information has not already been made public. It is clear that information is to be considered “made public” within the meaning of Article 7.1 if it has been disclosed in accordance with the provisions of Article 17 of MAR, but it is not explicitly required that the information has been disclosed in accordance with Article 17 in order to be considered “made public” under Article 7.1. This is a controversial issue, and it would be going too far to discuss it in detail here, but it is sufficient to note that information may generally be considered to be made public within the meaning of Article 7.1 if it is accessible to everyone, for example through dissemination in the mass media.¹² This could also be the case, for example (but not necessarily, depending on the impact on the individual issuer), when a central bank announces an interest rate cut that affects the value of a bond issuer’s outstanding bonds, or when a credit rating agency announces a change in an issuer’s credit rating.

2.1.3. “Relating to the issuer or the financial instruments”

The third element set out in Article 7.1 is that inside information is information relating directly or indirectly to the issuer or its financial instruments. This element is less likely to cause practical problems in the application of Article 7.

11 Cf. Klöhn (2018), *Marktmissbrauchsverordnung*, Beck, p. 172–173 and Hansen, *Den kvalitative karakter af intern viden – en analyse af Geltl og Lafonta*, Nordisk Tidsskrift for Selskabsret no. 1, 2015, p. 61.

12 See, for example, CESR’s Market Abuse Directive Level 3 – second set of CESR guidance and information on the common operation of the Directive to the market (CESR/06-562b), paragraph 1.9, recital (28) of MAR, and Ventoruzzo/Mock (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, Oxford University Press second edition, 2021, pp. 280 et seq. Hansen also discusses the issue in Hansen (2017), *Issuers’ Duty to Disclose Inside Information*, ERA Forum 18, p. 26.

All information arising from an issuer's activities which relates to the issuer's behaviour is considered to be information *directly* concerning the issuer,¹³ but also includes some information regarding the issuer's financial instruments.¹⁴ Information that *indirectly* concerns an issuer refers to information that does not originate in the issuer's business and does not directly relate to its financial instruments, but which nevertheless affects the issuer's business. The distinction between information that directly and indirectly concerns the issuer is of particular importance in the disclosure context, as the issuer is only obliged to disclose inside information that directly concerns the issuer (see below).

2.1.4. "Significant price effect"

The core of the assessment of what constitutes inside information under Article 7.1 of MAR is the element of "significant price effect". What constitutes a "significant price effect" has been discussed in the context of market abuse for a long time, and the test has been extensively discussed in the literature in relation to issuers with listed equities.¹⁵ Nevertheless, no general consensus has been reached on the meaning of the element, and there are significant contradictions in the literature. The issue is largely abstract, and it is difficult to draw any generalised conclusion from the material currently available. The issue has not yet been addressed by the CJEU (although some guidance can probably be drawn from the cases on the assessment of "precise nature" discussed above). However, with this reservation, some general observations can be made.

As in the case of an assessment of whether information is of a "precise nature", the assessment of what has a "significant price effect" must be made on the basis of a probability assessment based on the circumstances that existed at the time of the assessment. In other words, looking at a case after the fact, a hypothetical *ex ante* assessment should be made, in principle without taking into account actual price movements as a result of the subsequent disclosure of the information, but rather on the basis of whether the information is likely to be price-sensitive from a general or empirical point of view, both based on experi-

13 CESR's Market Abuse Directive Level 3 – second set of CESR guidance and information on the common operation of the Directive to the market (CESR/06-562b) provided a number of examples of such information, see p. 7.

14 Cf. Veil (ed.), *European Capital Markets Law*, 2017, Hart Publishing, p. 357.

15 See for only a couple of examples (with plenty of references) Lehmann/Kumpmann (eds.), *European Financial Services Law*, 2019, C.H. Beck, p. 687 et seq., Kalss/Oppitz/Torggler/Winner, *EU Market Abuse Regulation – A Commentary on Regulation (EU) No 596/2014*, Edward Elgar, 2021, p. 69 et seq., and Ventoruzzo/Mock (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, Oxford University Press second edition, 2021, pp. 283–291.

ence in the market in general and on any experience in the individual company.¹⁶ The fact that the assessment must be based on what experience shows is likely to influence the price does not mean that it is possible to define in advance certain types of information that should *always* be considered inside information (other than in the very simple examples). A holistic assessment must be made on a case-by-case basis, but a helpful starting point can be taken from what, based on experience, tends to be price-sensitive information.

Furthermore, the assessment of what is to be considered as having a significant price impact is to be made with the so-called “reasonable investor test” as a basis. The test is provided as an auxiliary rule in Article 7.4 of MAR:

For the purposes of paragraph [7.1], information which, if it were made public, would be likely to have a significant effect on the prices of financial instruments, derivative financial instruments [...] shall mean information a reasonable investor would be likely to use as part of the basis of his or her investment decisions.

Although the meaning of the reasonable investor test is debated, it seems clear that it should be interpreted relatively broadly. The reasonable investor is hardly meant to be an investor who merely makes a cold and logical fundamental analysis,¹⁷ but rather the test is supposed to exclude such information

16 This is already apparent from the wording of Article 7.1 of MAR, where the price effect element is preceded by the phrase “*would be likely* to have a significant effect” (italics added). Recital (15) in the preamble to MAR also states: “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.” CESR’s Market Abuse Directive Level 3 – second set of CESR guidance and information on the common operation of the Directive to the market (CESR/06-562b) also states that impressions should be taken of what is price-sensitive information based on experience (p. 1.13: “the relevance of the information as regards the main determinants of the financial instrument’s price”).

17 In CESR’s Advice on Level 2 Implementing Measures for the Proposed Market Abuse Directive (CESR/02-089d), it was only stated that the reasonable investor is “a person that thinks and behaves in a rational way” (p. 10, footnote 1). *Kalss/Oppitz/Torggler/ Winner, EU Market Abuse Regulation – A Commentary on Regulation (EU) No 596/2014*, 2021; Edward Elgar, states that the reasonable investor “unanimously [is] considered to be a rational, adequately informed, attentive, critical and familiar player on the financial markets. This refers less to small or private investors but rather more to institutional, informed market participants” (p. 173). Although this description is relatively bland in practice, it is clear that there is no such consensus in the literature. In *Ventoruzzo/Mock* (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, 2021, Oxford University Press second edition, the uncertainty surrounding the concept is highlighted, stating on pp. 286–287: “The one thing that is certain is that reference to the ‘reasonable’ investor presumably indicates an investor who thinks and behaves in a rational way and who is able to distinguish information that might affect the economic

that is unlikely to be price influencing. The first delegated MAD I directive stated that a reasonable investor takes into account all existing, available information when making an investment decision,¹⁸ and the equivalent is set out in recital (14) of MAR. It could possibly be argued that the reasonable investor is a professional investor, and it has even been discussed whether such a prefix should be included in the description of the reasonable investor in the regulatory text.¹⁹ However, one quickly realises that “professional investors” are a far from homogeneous group with a variety of, often conflicting, investment strategies and valuation models (compare, for example, pension funds, hedge funds, high-frequency traders, short sellers and private equity funds, to name a few with different investment profiles).²⁰ In addition, of course, many professional investors manage retail investors’ investments according to their preferences. In both the UK and the US, a similar position has been adopted, with a perspective of the reasonable investor that can be summarised, with some caution, as a reasonably rational person with an interest in economics and with (some) experience of investing in the relevant market, who invests based on an informed and logical analysis of all available information.²¹

returns of the investment from information that does not have such an outcome. Adding this to the fact that professional (institutional) investors usually make the market price, the relevant model seems to be that of the ‘reasonable professional’ investor. [...] The definition, however, does not allow any significant distinction among such.” One conclusion that can probably be drawn is that the reasonable investor does not engage in noise trading, and that the assessment of what is to be regarded as inside information should not take account of such behaviour, see for example *Kramer, Noise Trading, Transaction Costs, and the Relationship of Stock Returns and Trading Volume*, IMF Working Papers No. 126, 1994.

- 18 See Commission Directive 2003/124/EC of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards the definition and public disclosure of inside information and the definition of market manipulation, Recital (1).
- 19 See ESME (2007), *Market Abuse EU Legal Framework and Its Implementation By Member States: A First Evaluation*, p. 9.
- 20 Cf. *Ventoruzzo/Mock* (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, Oxford University Press second edition, 2021, pp. 285–286.
- 21 In the US literature, the reasonable investor has been described as a rational person who invests based on an informed analysis, but not as a professional investor, see *Lin, Reasonable Investor(s)*, Boston University Law Review 2015, 95, p. 466, and *Rose, The Reasonable Investor of Federal Securities Law*, Vanderbilt Law School Faculty Publications, 2017, p. 90 et seq. with references. A high level of requirement for the ‘reasonableness’ of the reasonable investor has been further criticised, see *Black, Behavioral Economics and Investor Protection: Reasonable Investors, Efficient Markets*, Loyola University Chicago Law Journal 2013 (44), pp. 1495–1496. In *Ventoruzzo/Mock* (eds.), *Market Abuse Regulation: Commentary and Annotated Guide*, Oxford University Press second edition, 2021, on the theme of a professional reasonable investor, the fol-

In light of these observations, the reasonable investor test, taken as a whole, does not seem to be regarded as a particularly high standard for the type of information that should be considered as inside information. Rather, the test should be seen as another interpretative tool to weed out information that a rational and economically informed investor would not consider relevant to the pricing of a financial instrument, thus limiting the issuer's disclosure burden and sparing the market information that is not relevant to price formation.²² The assessment to be made is thus qualitative rather than quantitative, in the sense that the element "significant price effect" cannot be translated to a percentage on the basis of Article 7 and the reasonable investor test.²³

lowing is stated (p. 285, sources omitted): "[...] the relevant model seems to be that of the 'reasonable professional investor' or at least that of the 'non-average' investor: not the 'smartest-guy in the room', but an investor who shows a greater degree of sophistication than the average. A reason for this interpretation is not only that markets are increasingly dominated by sophisticated professional investors, but also that opining otherwise would risk leaving market abuse unpunished, at least in some cases. Insiders are often sophisticated, non-average parties who have a significant knowledge of their company and the industry in which it operates. Testing their behaviour with a less demanding standard could undercut the effectiveness of the enforcement and ultimately undermine the achievement of the objectives pursued by the Market Abuse Regulation."

22 See Krause & Brellocks, *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 2013, 8(3), 293: "First, it is important to be aware that the reasonable investor test has a limiting function, i.e. it should filter out information which is simply not important enough to constitute inside information. Its purpose is to ensure that not all information which is precise and which may potentially have an impact on the issuer's securities will constitute inside information (which must be immediately disclosed)." Hansen, *Issuers' Duty to Disclose Inside Information*, 2017, ERA Forum 18 writes (p. 30): "Although the concept of inside information is shared by both the regime on insider dealing and the one on disclosure, it is apparent from its case law that in respect of defining the concept of inside information the CJEU focuses on the need to prevent insider dealing and consequently the test of materiality concerns information that can be used for insider dealing. This is a rather low threshold."

23 Cf. the British Upper Tribunals decision of May 27, 2014 (Hannam) p. 24, paragraph 10: "Our view is that a 'significant' effect is one which is to be contrasted with an insignificant, in the sense of trivial, effect. What is, or is not, trivial will depend on the particular circumstances of the case: for instance, a 1 p rise in a share worth £10 may be regarded as trivial but a 1 p rise in a share worth 2p would not. There is, we accept, a certain inherent uncertainty in this approach but it provides a sensible way of reaching the essence of what is significant. The reasonable investor will surely take account of information which may have a non-trivial effect on price: such information may have an effect on price which is significant to the reasonable investor. Our approach, is, we consider, the way in which it is appropriate to deal with the tension between section 118C(2)(c) and section 118C(6). We do not think it would be helpful to try and postulate any quantita-

What has been stated here about the fact that neither the elements of “precise nature” nor “significant price effect” seem to set particularly high thresholds for what is to be considered inside information risks being understood as meaning that almost all information can constitute inside information. However, this is not the intention, and as far as can be judged from the case law of the CJEU and what has been said in the literature, it is not the prevailing opinion either. Determining what constitutes inside information in an individual case is often a very difficult and uncertain process once one moves beyond the simple and clear cases, and an overall assessment must always be made. However, this caution should, in the view of this author, result in different perspectives being taken *ex ante* and *ex post*. As an issuer, there is good reason to apply Article 7 of MAR *ex ante* with a broad understanding: to consider information as inside information in difficult and unclear cases rather than dismissing it as non-price sensitive, and to endeavour to make this assessment early. In other words, in difficult and unclear cases, the issuer should err on the side of caution. This is largely because the definition of inside information in MAR is used both to determine what information is prohibited from being traded under the prohibition on insider dealing under Article 8 of MAR, and to determine what information an issuer must disclose under Article 17. The problem that arises is sometimes referred to as the short blanket problem: with a definition of inside information that applies to both the prohibition of insider trading and the disclosure requirement, we either freeze our noses or our toes.²⁴ If we read the definition narrowly, we narrow the disclosure burden on issuers, but at the cost of failing to tackle behaviour that we actually want to prosecute as insider trading. Broadening the definition helps us to penalise insider trading, but the issuer’s disclosure burden risks becoming very extensive.

When assessing whether an issuer has *breached* the disclosure rules of MAR *ex post* – for example, whether the issuer has identified inside information, kept a logbook and disclosed the information (or taken a decision on delayed disclosure) in a timely manner – uncertainty in the assessment of what constitutes inside information must lead to caution in the other direction. It must then be considered that it can be extremely difficult for an issuer to determine what constitutes inside information in a particular case. If the issuer can credibly demonstrate that a reasonable assessment has been made within a reasonable time, it should not give rise to criticism if the information subsequently turns

tive approach to determining what constitutes a ‘significant’ effect.” See also *Kalss/Oppitz/Torggler/Winner, EU Market Abuse Regulation – A Commentary on Regulation (EU) No 596/2014*, Edward Elgar, 2021, p. 70.

24 See for instance *Hansen, Say When: When Must an Issuer Disclose Inside Information?*, Nordic & European Company Law Working Paper no 16–03, 2016, pp. 6–8, with reference to Di Noia.

out to constitute inside information despite the issuer's assessment having come to the opposite conclusion (or vice versa), or if the assessment has deviated from what is often done in a similar case.

2.2. Article 17 and the duty to disclose inside information

When information is deemed to constitute inside information under Article 7 of MAR, Article 17 imposes an obligation on the issuer to “inform the public as soon as possible of inside information which directly concerns that issuer”, by disclosing the information “in a manner which enables fast access and complete, correct and timely assessment of the information by the public”. The meaning of “as soon as possible” is not further defined in MAR or related legal acts. However, it seems clear that the requirement is to be understood as a qualitative requirement for prompt disclosure “without undue delay” rather than a quantitative requirement for disclosure immediately, within a certain timeframe, and that the assessment must also be made on a case-by-case basis.²⁵ Although the assessment must be made on a case-by-case basis, the issuer is presumed to have an organisation that allows for the prompt and efficient handling of information. Deficiencies in procedures or decision-making structures, such as the need to obtain the approval of the board of directors or the CEO or the lack of manoeuvrability, are not taken into account when assessing whether the information has been disclosed as soon as possible.²⁶ Whether the trading venue on which the issuer's instruments are traded is closed or open does not in principle affect the assessment either.

In summary, the requirements for issuers to disclose inside information are far-reaching. The threshold for what constitutes inside information is at least relatively low, and once inside information has arisen it must be disclosed promptly. However, such a regime without exemptions would be unreasonable in practice, as in many situations the issuer may have a strong legitimate interest in keeping inside information confidential. An exception to the disclosure obligation is therefore provided for in Article 17.4 of MAR, according to

25 Cf. CESR's *Advice on Level 2 Implementing Measures for the proposed Market Abuse Directive*, CESR/02-089d, paragraph 63: “In meeting this [as soon as possible] objective, it is essential that the time lapse between the event to which the information refers is not longer than strictly necessary for the issuer to decide whether the event involves inside information that is subject to publication. However, this decision may not be delayed intentionally or negligently.”

26 See for instance *Hansen, Issuers' Duty to Disclose Inside Information*, ERA Forum 18, 2017, p. 31. It is possibly also reflected in paragraph (55) in the preamble to MAR.

which an issuer may delay the public disclosure of inside information if the following cumulative conditions are met:

- (a) immediate disclosure is likely to prejudice the legitimate interests of the issuer or emission allowance market participant,
- (b) delay of disclosure is not likely to mislead the public,
- (c) the issuer or emission allowance market participant is able to ensure the confidentiality of that information.

ESMA has issued guidelines on how these conditions are to be interpreted in guideline 2016/1478. It should also be mentioned that MAR has been reviewed within the EU Listing Act, and the duty to disclose inside information has become at least slightly less demanding. This applies to inside information related to intermediate steps in a protracted process as referred to in Article 7 (2) and 7(3), and condition (b) for delayed disclosure (*delay of disclosure is not likely to mislead the public*) has been changed to a condition requiring that the delay is not in contrast with previously disclosed information the same topic.²⁷

3. *The difference between equity and bond price formation and what affects bond prices*

Both literature and case law on what constitutes inside information under Article 7 of MAR deal first and foremost (and often exclusively) with what applies with regards to equity instruments. Something therefore needs be said about the differences in pricing and price formation in the various instruments.

3.1. *What affects the price formation of equities*

A classical legal perspective on the limited liability company is to consider it, in Jensen and Meckling's terminology, a *nexus of contracts*.²⁸ The implication of such a perspective is that the limited liability company becomes a form of financing and organising certain activities, or put differently, a set of explicit and implicit "contracts" between the company and its stakeholders. From this perspective, it can be stated that the vast majority of contracts between a company

27 The consolidated version of MAR is available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02014R0596-20241204>.

28 See Jensen/Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, Journal of Financial Economics, 1976, 3(4), 305.

and its various stakeholders – its creditors, employees, management and board of directors, customers, suppliers, etc. – are “closed contracts” in terms of economic claims, in the sense that the economic rights and obligations arising from the contracts are predefined. Employees are entitled to a specific salary for certain tasks, customers may buy a product or service for a certain amount, and the same applies to suppliers who sell a product or service to the company. Even variable remuneration contracts normally follow certain pre-defined criteria that make the contract “closed”. The same applies in particular to the company’s creditors, where a bank, for example, lends a certain amount of money to the company for a certain period of time at a certain predetermined interest rate.

However, one of the company’s contracts is different, namely that between the company and its shareholders. This “contract” can be characterised as open-ended, in the sense that the shareholders, in exchange for the capital injection at the time of formation or issue, are not given any specific right to a return, but only a right to the residual assets of the company without any time limit. In other words, they receive a return on their investment only after the company has fulfilled its obligations towards other stakeholders.

The fact that the share is an open contract means that, in principle, the economic value of a share is a function of the performance of the company’s business as a whole, both now and in the future. If the company does business that increases its margins or size and thus the prospects or expected size of future profits, the shares (in theory) increase in value. The same is true if the company’s financial situation strengthens so that the future need to retain profits in the company decreases (and the scope for dividends thus increases). And if the company incurs unforeseen costs or the economic situation becomes more uncertain for one reason or another, the value of the shares will (again, in theory) fall. These are probably fairly uncontroversial statements, but they are nonetheless an important starting point for recognising that, in principle, any information about a company’s economic development or the conditions for it can influence the valuation of its shares. The same generally applies to other share or share price related instruments, such as warrants, convertible bonds, and equity derivatives.

3.2. What affects the price formation of corporate bonds

However, the situation is different for corporate bonds. In general, a corporate bond is as a debt instrument with a nominal amount that falls due at a certain point in time, where the return consists of an interest rate determined by the terms of the bond, either fixed or linked to a reference rate (and in the context of this article, where the loan cannot be converted into shares, since that would

make it an equity instrument). Corporate bonds as a contract can therefore, as far as the right to compensation is concerned, be considered a closed contract. The firm-specific uncertainty in a bond can thus be said to be limited to the risk that the debtor cannot fulfil its financial obligations to the creditor (*default*). Thus, the information that can be assumed to be relevant for the valuation of a corporate bond is more limited than for equities.

The basis for the pricing of a bond is, of course, the terms of the bond, and the rights on which bondholders base their investment. In addition, the fundamental value of a bond is determined by the *risk of default*. This risk is a function of two components: the probability that the issuer will fail to honour its financial obligations under the bond, and the expected loss if default occurs. The components are often described with the terms *probability of default* (PD) and the *loss given default* (LGD).²⁹ For example, if the issuer's probability of default is 1 per cent,³⁰ and the loss given default for a particular bond is estimated to be 50 per cent due to the fact that the loan is secured, the credit risk is thus 0.5 per cent of the remaining debt at the time of default.³¹ Thus, for disclosure purposes, information from which new conclusions about an issuer's probability of default can be drawn should be assumed to be price-sensitive information. The implication of this is that if the probability of default is already zero or close to zero per cent (as is normally the case, for example, for bonds rated A-AAA), then information that the issuer's business has developed in a *positive direction* cannot be assumed to be price-sensitive for a bond issuer, but information that the business has developed in a *negative direction* to the extent that it actually leads to an increased probability of default is another matter. The same must apply to information from which conclusions can be drawn about loss given default and changes in seniority impacting loss given default (see further below).

29 Both the loss of the bond's nominal amount and the loss of interest payments must be taken into account. Loss given default is calculated based on a number of different factors related to the bond as a financial instrument, the issuer, the relevant industry, and the seniority of the loan and related collateral, often based on the model developed by Moody's called *LossCalc*, see for example *Gupton/Stein, LossCalc: Model for Predicting Loss Given Default (LGD)*, Moody's Modeling Methodology, 2002. Conversely, one can also talk about the *recovery rate* that can be expected in the event of restructuring or bankruptcy.

30 This could be the expected probability of default for an issuer with a BBB rating, see for example S&P Global Ratings, *Default, Transition and Recovery: 2022 Annual Global Corporate Default And Rating Transition Study*, S&P Research and Insights, 2022.

31 This is usually described by the formula expected loss = (exposure at default)(probability of default)(loss given default). Calculating the probability of default and the expected loss given default in practice is, of course, a much more complicated matter.

However, credit risk as such is not only related to the probability of the issuer's default. A similar effect may arise in the context of mandatory redemptions, mandatory exchanges of securities, and also in the event of a change in the bond terms in such a way that it results in a credit loss for the bondholders. This type of risk is sometimes referred to as *documentation risk* or *event risk* and, in the case of early redemption etc. *call risk*.³²

The value of a bond is also affected by factors other than the risk of credit loss. One such factor is interest rate risk. If the interest rate on a bond with a AAA rating is 2.2 per cent, and the central bank raises the policy rate from 2.0 to 2.25 per cent, this means that the value of the bond will fall and the bond will trade below par to compensate for the relatively low interest rate. The opposite would apply if the central bank were to cut its interest rate from 2.0 to 1.75 per cent. The longer the maturity of a bond, the greater the interest rate risk. A related risk, especially for bonds with longer maturities, is inflation risk. External factors such as interest rate risk, inflation risk and the economic outlook have a greater impact on the pricing of a bond the lower the firm-specific risk.³³ Thus, whether it is mainly the company-specific credit risk or interest rates and inflation that influence the pricing of a bond varies depending on the credit-worthiness of the issuer.

Another factor affecting the pricing of a corporate bond is liquidity risk. In simple terms, this risk can be described as the risk that an investor wishing to sell a bond will not receive a price that reflects the bond's value in terms of interest rate and credit risk, and it is well documented that low liquidity has a negative effect on the value of bonds in the secondary market.³⁴ The liquidity of a corporate bond can be affected by, for example, the size of the issue, the

32 See for instance *Jen/Wert, The Effect of Call Risk on Corporate Bond Yield*, *The Journal of Finance* 1967, 22(4), 637.

33 See for instance *Pitt/Groskaufmanis, A Tale of Two Instruments: Insider Trading in Non-Equity Securities*, *The Business Lawyer* 1993, (49)1, 215–216 (in particular p. 216, "The values of all high-grade or government bonds in a portfolio will decline when interest rates rise. The values of high-yield bonds, on the other hand, are somewhat less sensitive to changes in the interest rate because they respond to changes in the financial outlooks of the individual underlying companies").

34 See for instance *Longstaff, Mithal & Neis, Corporate Yield Spreads: Default Risk or Liquidity? New Evidence from the Credit Default Swap Market*, *The Journal of Finance* 2005, 60(5), 2213; *Chen/Lesmond/Wei, Corporate Yield Spreads and Bond Liquidity*, *The Journal of Finance* 2007, 62(1), 119; *Acharya/Amihud/Bharath, Liquidity Risk of Corporate Bond Returns*, *Journal of Financial Economics* 2009, 110(2), 358, pointing in particular to differences between investment grade and non-investment grade bonds, *Lin/Wang/Wu, Liquidity Risk and Expected Corporate Bond Returns*, *Journal of Financial Economics* 2011, 99(3), 628, and *De Jong & Driessen, Liquidity Risk Premia in Corporate Bond Markets*, *Quarterly Journal of Finance* 2012, 2(2), 1.

credit rating, the currency, the industry in which the issuer operates, how often the issuer issues bonds in the market, etc.

4. Information that would typically be considered inside information for a corporate bond issuer

The general meaning of Articles 7 and 17 of MAR have been explained above, followed by the factors that generally influence the pricing of a bond. As discussed, the final assessment of when information constitutes inside information must always be made on a case-by-case basis. With this important caveat however, this section will address some practically important (non-exhaustive) examples of when inside information will often arise in relation to a corporate bond issuer.

4.1. Changes in credit risk

If an issuer's financial situation changes to such an extent that it affects the likelihood of the issuer being able to fulfil its obligations under the bond, there is no doubt that information thereof must be deemed to constitute inside information as a starting point. The question is thus rather how large a change must be for it to be regarded as having a "significant price effect", and whether it matters whether the change in credit risk is positive or negative.

The following section concludes that the available empirical data clearly indicate that downgrades of credit ratings (which are in principle a measure of credit risk) normally have a significant negative impact on bond prices, and that a downgrade of credit ratings must therefore generally be assumed to constitute inside information, especially when the credit rating is already in the lower range of investment grade or non-investment grade from the outset. Thus, in the case of a negative change in an issuer's financial situation, a rule of thumb could be that if the change is of such magnitude that it would have led to a downgrade of the credit rating, then information about the change should be considered inside information.³⁵ If an adverse change in the economic situation, while significant, is not of such magnitude that it has caused or would have caused a downgrade, the assessment may be different, given the granularity of the credit rating scale. If the issuer or its bonds are rated at the higher end

35 And this has not already happened, either because the issuer has no credit rating or because the credit rating is "lagging". Another thing is that this is probably a call an issuer will be less inclined to make.

of the investment grade segment of the credit rating scale, a deterioration in the economic situation that is not of such magnitude that it has caused or would have caused a downgrade of the credit rating should not be assumed to have a price impact on the issuer's bonds, and thus not constitute inside information.³⁶ If the issuer is at the lower end of the scale, and in particular in the non-investment grade segment, the issuer should probably be more vigilant, and perhaps rather assume that even a minor negative change in the economic situation constitutes inside information.³⁷

For positive changes in an issuer's financial situation, the price impact appears to be smaller. In some studies, a credit rating upgrade has been shown to have a positive effect on bond pricing,³⁸ and in others not.³⁹ Nevertheless, it is reasonable to assume that a price change resulting from a rating change from, for example, BBB+ to BBB should (pricing wise) mirror a corresponding change from BBB to BBB+, *ceteris paribus*.⁴⁰ Thus, a positive change in the financial situation of an issuer should be considered as inside information, provided that

36 See for instance Wansley/Glascock/ Clauretie, *Institutional Bond Pricing and Information Arrival: The Case Of Bond Rating Changes*, Journal of Business, Finance & Accounting 1992, 19(5), 733, Hite/Warga, *The Effect of Bond-Rating Changes on Bond Price Performance*, Financial Analysts Journal 1997, 53(3), 35, Steiner/Heinke, *Event Study Concerning International Bond Price Effects of Credit Rating Actions*, International Journal of Finance & Economics 2001, 6(2), 139, and May, *The Impact Of Bond Rating Changes On Corporate Bond Prices: New Evidence from the Over-The-Counter Market*, Journal of Banking & Finance 2010, 34(11), 2822. Note that the studies refer to changes in credit ratings, and not to the financial situation of the issuer directly.

37 It bears mentioning the requirement for early warning and access to information requirements in Article 3 of Directive on preventive restructuring frameworks ((EU) 2019/1023), requiring Member States to ensure that “debtors have access to one or more clear and transparent early warning tools which can detect circumstances that could give rise to a likelihood of insolvency”.

38 See for instance Hand/Holthausen/Leftwich, *The Effect of Bond Rating Agency Announcements on Bond and Stock Prices*, The Journal of Finance 1992, 47(2), 733. In May, *The Impact Of Bond Rating Changes On Corporate Bond Prices: New Evidence from the Over-The-Counter Market*, Journal of Banking & Finance 2010, 34(11), 2822 a small but significant positive price effect is identified for credit rating upgrades, especially at the lower end of the rating scale.

39 See for instance Wansley/Glascock/Clauretie, *Institutional Bond Pricing and Information Arrival: The Case of Bond Rating Changes*, Journal of Business, Finance & Accounting 1992, 19(5), 733, and Steiner/Heinke, *Event Study Concerning International Bond Price Effects of Credit Rating Actions*, International Journal of Finance & Economics 2001, 6(2), 139.

40 If not, this would logically imply that the bond price when the issuer went from BBB+ to BBB and then back to BBB+ in a short period of time, *ceteris paribus*, would decrease, which is hardly in line with what has been said above about how a reasonable investor acts rationally.

a change in the opposite direction could be assumed to have a an effect on the bond price. Again, however, a favourable change in the financial position of the issuer, where the issuer was already in a good financial position before the change, should be considered less relevant to price formation (if at all) than a change where the issuer was in a worse financial position to begin with.

4.2. *Changes in credit ratings*

Related to the assessment of when a change in credit risk should be considered inside information, as discussed in the previous section, is the assessment of when information about changes to an issuer's credit rating constitutes inside information. From a theoretical point of view, it seems obvious that information about a change in credit rating must be viewed as inside information, as it means by definition that an independent credit rating agency has assessed that the issuer's creditworthiness has changed to such an extent that the change has a material impact on the risk of the issuer becoming insolvent. That this is the case in practice is also well documented empirically in relation to *equity* price formation. As far as can be judged, it is now in principle clear from the empirical literature that a negative change in credit ratings has a significant impact on the price of shares and credit default swaps.⁴¹ Furthermore, the price effect seems to be greatest in the case of credit rating downgrades when the credit rating is already relatively low to begin with.⁴² It does not seem to be clear

41 The literature is extensive. See for instance *Griffin/ Sanvicente, Common Stock Returns and Rating Changes: A Methodological Comparison*, The Journal of Finance 1982, 37 (1), 103, *Holthausen/Leftwich, The Effect of Bond Rating Changes on Common Stock Prices*, Journal of Financial Economics 1986, 17(1), 57, *Hand/Holthausen/Leftwich, The Effect of Bond Rating Agency Announcements on Bond and Stock Prices*, The Journal of Finance 1992, 47(2), 733, *Goh/Ederington, Is a Bond Rating Downgrade Bad News, Good News or No News for Stockholders?*, The Journal of Finance 1993, 48 (5), 2001; *Followill/Martell, Bond review and rating change announcements: An examination of informational value and market efficiency*, Journal of Economics and Finance 1997, 21(2), 75, *Kliger/Sarig, The Information Value of Bond Ratings*, The Journal of Finance 2000, 55(6), 2879, *Dichev/Piotroski, The Long-Run Stock Returns Following Bond Ratings Changes*, The Journal of Finance 2001, 56(1), 173, *Norden/Weber, Informational Efficiency of Credit Default Swap and Stock Markets: The Impact of Credit Rating Announcements*, Journal of Banking & Finance 2004, 28(11), p. 2813, and *Even-Tov/Ozel, What Moves Stock Prices around Credit Rating Changes?*, Review of Accounting Studies 2021 (26), 1390.

42 There are at least two possible explanations for why rating changes seem to have a larger price impact the further down the rating scale the issuer initially is. One is that the transparency and pricing of bonds in the credit market is better for larger issuers with higher ratings than for smaller companies with lower ratings, and that the market is therefore

whether credit rating upgrades have any significant price impact on equity prices if the issuer had a relatively good credit quality to begin with.⁴³

The price impact of credit rating changes on corporate bonds has not been studied to the same extent as equities. However, in the studies that have been conducted, the results appear to be essentially the same: when an issuer's credit rating is downgraded, this has a significant price impact on outstanding corporate bonds, and the price impact is in principle greater the lower the issuer's initial credit rating.⁴⁴ As regards the impact on bond prices, rating upgrades have been shown to have a significant price impact in some studies, but not in others.⁴⁵

aware of the credit risk before the rating change actually takes place, so that the price movement is not as large at the time of the change. The second is that the difference in credit risk between different credit ratings is greater further down the scale, which is reflected, for example, in the capital requirements under Solvency II (see, for example, JP Morgan Asset Management, *Solvency II Standard Formula Capital Charges For Market Risk*).

43 See for instance Jorion/ Zhang, *Information Effects of Bond Rating Changes: The Role of the Rating Prior to the Announcement*, *The Journal of Fixed Income* 2016, 16(4), 45 and Baraccat/Bortoluzzo/Gonçalves, *Rating Changes and The Impact on Stock Prices*, *Revista Brasileira de Gestão de Negócios* 2020, 22(1), 539.

44 See Katz, *The Price and Adjustment Process of Bonds to Rating Reclassifications: A Test of Bond Market Efficiency*, *The Journal of Finance* 1974, 28(2), 551, Grier/Katz, *The Differential Effects of Bond Rating Changes Among Industrial and Public Utility Bonds by Maturity*, *The Journal of Business* 1976, 49(2), 226, Hand/Holthausen/Leftwich, *The Effect of Bond Rating Agency Announcements on Bond and Stock Prices*, *The Journal of Finance* 1992, 47(2), 733, Wansley/Glascock/Clauretie, *Institutional bond pricing and information arrival: the case of bond rating changes*, *Journal of Business, Finance & Accounting* 1992, 19(5), 733, Hite/Warga, *The Effect of Bond-Rating Changes on Bond Price Performance*, *Financial Analysts Journal* 1997, 53(3), 35, Steiner Heinke, *Event Study Concerning International Bond Price Effects of Credit Rating Actions*, *International Journal of Finance & Economics* 2001, 6(2), 139, and May, *The impact of bond rating changes on corporate bond prices: New evidence from the over-the-counter market*, *Journal of Banking & Finance* 2010, 34(11), 2822.

45 Hand/Holthausen/Leftwich, *The Effect of Bond Rating Agency Announcements on Bond and Stock Prices*, *The Journal of Finance* 1992, 47(2), 733 identifies a price impact as a result of both upgrades and downgrades of credit ratings: "price effects are also observed for actual downgrade and upgrade announcements by rating agencies". Wansley/Glascock/Clauretie, *Institutional bond pricing and information arrival: the case of bond rating changes*, *Journal of Business, Finance & Accounting* 1992, 19(5), 733, identifies no effect for rating increases, see 734: "bond rating increases are not associated with announcement effects". May, *The impact of bond rating changes on corporate bond prices: New evidence from the over-the-counter market*, *Journal of Banking & Finance* 2010, 34(11), 2822 identifies a small but significant positive price effect for credit rating upgrades. Steiner/Heinke, *Event Study Concerning International Bond Price Effects of*

Against this background, the following conclusions can probably be drawn regarding when changes in an issuer's credit rating should be considered as inside information under Article 7 of MAR. As a general rule, if the issuer's credit rating is downgraded, this information should be considered as inside information.⁴⁶ To the extent that the issuer's credit rating prior to the downgrade is at the lower end of investment grade or below, this general rule can probably be applied without further ado. However, if the downgrade is from AAA to AA+, there may be room in the individual case to claim that the information does not constitute inside information with reference to available empirical evidence. On the other hand, since a difference between AAA and AA+ credit ratings represents a not insignificant difference in the risk of default, it seems likely that this is information that a reasonable investor would be interested in utilising as part of the basis for his or her investment decision given the discussion in section 2, and great caution seems to be called for here.⁴⁷

If, on the other hand, the issuer receives a credit rating upgrade, there is less clear empirical support for the impact on the bond price, and whether such information should be considered inside information is unlikely to be answered in general terms. However, it seems sensible to assume that a reasonable investor would use information about a credit rating upgrade as part of the basis for his or her investment decision, mirroring what applies in downgrades (see above). It also seems likely, subject to the lack of firm empirical support, that it should matter whether the issuer is, for example, upgraded from BB to BBB or whether it is an upgrade from AA+ to AAA.⁴⁸

Credit Rating Actions, International Journal of Finance & Economics 2001, 6(2), 139, identifies no price effect for credit rating upgrades, but a price effect for downgrades.

- 46 It can however be noted that the bond terms sometimes contain a so-called step-up clause, whereby the interest rate is increased if the issuer's credit rating changes from investment grade to non-investment grade. There are examples where a bond with a step-up clause therefore increases in value as a result of the downgrade. The information about the change in credit rating then still constitutes inside information, but on a different basis.
- 47 See also ESMA (2021), *Questions and Answers on the Market Abuse Regulation (MAR)*, ESMA70-145-111, p. 19, where the questions "Are credit ratings, rating outlooks and information relating thereto, pursuant to article 10(2a) of Regulation No 1060/2009, presumed to be inside information until disclosure to the public, or should a case-by-case assessment of the conditions in Article 7 of Regulation (EU) No 596/2014 be anyhow carried out?" is addressed.
- 48 In particular, information about movement across the boundary from non-investment grade to investment grade must reasonably be regarded as inside information under MAR, since it means, if nothing else, that a completely new group of investors then may purchase the bond.

In the case of both upgrades and downgrades, there is probably also reason to consider the remaining maturity of outstanding bonds in each individual case. For example, if an issuer receives a downgrade of its credit rating but the only outstanding bond matures in one month and it is clear that the bond will be repayable under the circumstances prevailing at the time, the information is unlikely to be of significance for the pricing of the bond. Consideration may also need to be given to whether a change in the rating was widely expected.⁴⁹

4.3. Buy-backs and voluntary security exchange offers

A relatively common phenomenon in the bond market is for an issuer to repurchase outstanding bonds in order to reduce its outstanding debt (a buy-back), which can be attractive when the bonds are trading below par or when the issuer is able to reduce its interest costs through repurchases. Such repurchases can be made either directly in the market or through the use of a public tender offer. The issuer may also launch a (voluntary) exchange offer for refinancing purposes, whereby bondholders are given the opportunity to subscribe to new bonds of the issuer in full or in part in exchange for their outstanding bonds.

A first question that needs to be asked regarding whether information about a buy-back offer or a voluntary exchange of securities constitutes inside information is how the value of the offer relates to the price at which the bonds are traded. Unless the premium paid is negligible or the buy-back or exchange programme is so small that it cannot be assumed to affect the market price, the information about it must be considered inside information, since it sends the signal that the issuer believes the bond is under-priced and since the buy-back programme in itself will likely affect the bond price. However, even in cases where the premium is relatively low or where it is difficult to determine what constitutes the market price of the bonds, there is reason to be cautious in assessing whether the information constitutes inside information, if the liquidity of the bond before the offer is limited (which would often be the case in the

49 Cf. Goh/Ederington, *Is a Bond Rating Downgrade Bad News, Good News or No News for Stockholders?*, The Journal of Finance 1993, 48(5), 2001. This does not refer to the case where information about a forthcoming rating change has been leaked from the credit rating agency, for example, but to the case where commentators and analysts have already publicly concluded that an issuer's credit rating should and probably will be downgraded, and where the change can thus already be assumed to be reflected in the price of the bonds. See also Bafin, *Issuer Guidelines Published by the Federal Financial Supervisory Authority: Module C: Requirements Based on the Market Abuse Regulation (MAR)*, 2020, p. 22.

many times illiquid bond market) and if a public offer is so extensive that it can be assumed to have a positive impact on liquidity.⁵⁰ Moreover, it probably cannot be ruled out that information that the outstanding volume of a particular bond is substantially reduced may in itself constitute inside information. Where this threshold lies must be assessed in each individual case, but given what has been said above regarding the threshold for what information should be considered to have a significant price effect under MAR, some caution is probably required. It is probably not possible to set a general percentage threshold for when the size of a public repurchase or securities exchange offer should be considered to constitute inside information, and the assessment must take into account the factors affecting the liquidity of the bond, such as the issuer and the size of the bond, as well as the investor base in the bond.

4.4. Mandatory security exchanges

If the bond terms contain provisions for mandatory security exchanges, this normally requires that a proposal to this effect is approved at a bondholders' meeting, making the decision binding for all bondholders. A mandatory exchange of securities is an almost expropriation-like procedure which is typically used when the issuer is in a difficult financial situation, and which normally involves the bondholders making not insignificant concessions on the financial terms of the bonds in order to avoid the issuer falling into financial crisis. It is therefore nigh self-evident that information that the bondholders' meeting has approved a proposal for a mandatory exchange of securities is one that a reasonable investor would use as part of the basis for his or her investment decision, unless the exchange of securities does not in principle affect the position of the bondholders (which in practice would be exceedingly rare). The same is likely to apply when an issuer decides to propose a mandatory exchange of securities, irrespective of the likelihood of the bondholders' meeting approving the proposal, since the fact that the issuer has concluded that such a measure is necessary should in itself be information of a precise nature that can be assumed to have a significant impact on the price, and an investor can draw conclusions about credit risk and possibly also default depending on the terms of the exchange of securities.

50 Cf. CESR's Market Abuse Directive Level 3 – second set of CESR guidance and information on the common operation of the Directive to the market (CESR/06-562b) which emphasises liquidity as a factor to be taken into account when assessing what may have a significant price effect, see paragraph 1.13.

4.5. Changes in terms and breaches

The fundamental conditions for an investment in bonds are governed by the bond terms, and change of terms should in principle always be considered as inside information. However, some distinction must be made regarding the type of terms that are changed. An issuer whose bonds are admitted to trading on a regulated market must also observe the disclosure requirement regarding changes in the rights attached to the bond.⁵¹

With reference to what has been said in section 3, changes *affecting credit risk* should likely always be considered as inside information, for example with regard to interest rate and interest payment, nominal amount, maturity and acceleration, collateral, and risk management mechanisms such as covenants. A change of this nature can reasonably only be considered as not having an effect on the bond price if it is so marginal that it is clear that it does not matter from an investor perspective. In other words, an issuer should assume that information about such a change in terms constitutes inside information, given how central the terms are to an investment decision and how difficult it would generally be to determine where a reasonable investor would draw the line as to when a term is not considered material to an investment decision. With reference to what has been said above regarding securities exchanges and repurchases, the same should, as a starting point, also apply with regard to changes to any conditions on repurchase, early redemption and voluntary and mandatory exchanges of securities. In line with what has been said in the previous section regarding proposals for mandatory exchanges, it is likely that the information should also be considered as inside information not only when a change of terms is approved by the bondholders, but also when the issuer decides to propose such a change, provided that the information about the change, if implemented, is deemed to constitute inside information.

What has been said about changes to the terms of the bond must also reasonably apply, *mutatis mutandis*, if the issuer breaches the terms.⁵²

51 See Article 16.2 in the Transparency Directive (2004/109/EC).

52 Cf. OECD (2023), *G20/OECD Principles of Corporate Governance*, OECD Publishing, subprinciple IV.A.10, stating, inter alia, that "the timely disclosure of material information on debt contracts, including the impact of material risks related to a covenant breach and the likelihood of their occurrence, in accordance with applicable standards, is necessary for investors to understand a company's business risks". See also *Bafin, Issuer Guidelines Published by the Federal Financial Supervisory Authority: Module C: Requirements Based on the Market Abuse Regulation (MAR)*, 2020, p. 22.

4.6. *Actions affecting seniority*

As discussed, credit risk is a fundamental component in the calculation of the value of a corporate bond. One factor in this calculation is the risk of default, which is relevant for disclosure purposes in relation to changes in credit risk and credit ratings. Another factor is the loss given default. For the calculation of the loss suffered by bondholders in a default event, the seniority of the bonds is, of course, essential.⁵³

Thus, *as a starting point*, actions by the issuer that affect the seniority of bonds should likely be considered to constitute inside information. This includes the case where the seniority of a bond is directly altered, for example through a change in terms and conditions that reduces the bond's priority in the event of default, and when (importantly) changes in an issuer's company group are carried out that results in a structural subordination. The seniority of bonds is also affected by whether the issuer's other creditors obtain a stronger position than the relevant bondholders, for example by providing security for another bond or a bank loan. Such information could therefore normally also be assumed to constitute price-sensitive information, and may constitute inside information depending on the impact on the relevant bonds.

4.7. *Changes of control and delisting*

Two final examples of when inside information is likely to arise in the bond market to be addressed concerns changes of control and delistings. The bond terms often contain provisions regarding changes of control of the issuer, providing that in the event of a change of control, the issuer must inform the bondholders and the market of the event.⁵⁴ However, it is debatable whether infor-

53 See for instance *Gupton/Stein, LossCalc: Model for Predicting Loss Given Default (LGD)*, Moody's Modeling Methodology 2002, p. 6, where "seniority grade (e.g., secured, senior unsecured, subordinate, etc.)" is highlighted first in the list of factors used in Moody's LossCalc model. Also note the wording "These factors have little intercorrelation, each is statistically significant, and together they make a more accurate prediction of LGD." The relationship between the seniority of the bonds and loss given default is probably obvious to a lawyer, but the impact has also been demonstrated empirically, see for example *Yao/Crook/Andreeva, Support vector regression for loss given default modelling*, *European Journal of Operational Research* 2015, 240(2), 528.

54 It is also common that the bond terms prescribes that a defined change of control leads to acceleration of the bonds.

mation about a major change in the company's ownership structure should be considered inside information.⁵⁵

There is empirical evidence that the value of corporate bonds in the secondary market drops significantly when a bond issuer is subject to a change of control if the new owner's credit rating (or unrated credit quality) is lower than that of the issuer, and vice versa.⁵⁶ Thus, information about an acquisition of at least all the shares in the company could be assumed to constitute inside information. However, the studies that have been carried out on the effects of changes of control on the value of corporate bonds are relatively few and the results do not seem to be unequivocal, so a general recommended stance is probably difficult to present (other than erring on the side of caution).

The case is clearer regarding delistings. The terms and conditions of the bonds will often require that the bonds be listed, and sometimes also contain specific mechanisms for what happens if the bonds are delisted for one reason or another, including requirements for the issuer to publicly disclose information on listing failure. However, even if such a requirement does not follow from the terms of the bond, information about an impending delisting of the bond must categorically be considered inside information for a variety of reasons, including impact on liquidity, change in holding conditions, and how the legal requirements on the issuer changes.

5. Summary

The question posed in this article is what constitutes inside information for a corporate bond issuer, that is, a company with bonds (but not shares) listed on

55 Note in particular that the situation addressed here is when only the bonds are listed, and not the shares. If the shares are listed, there is no doubt whatsoever that information about a public bid or corresponding change of control constitutes inside information. It is also debatable whether information about a change of control should be considered information that directly concerns the issuer under Article 7 and thus falls under the disclosure obligation in Article 17. See Veil (ed.), *European Capital Markets Law*, Hart Publishing, 2017, p. 357, and Bafin, *Issuer Guidelines Published by the Federal Financial Supervisory Authority: Module C: Requirements Based on the Market Abuse Regulation (MAR)*, 2020, p. 33, where it is argued that non-strategic changes of control (block changes) do not constitute information directly related to the issuer.

56 See for example Billet/King/Mauer, *Bondholder Wealth Effects in Mergers and Acquisitions: New Evidence from the 1980s and 1990s*, *The Journal of Finance* 2004, 59(1), 107; Kedia/Zhou, *Informed trading around acquisitions: Evidence from corporate bonds*, *Journal of Financial Markets* 2014, 18, 182, and Chen/Ramaya/Wu, *The wealth effects of merger and acquisition announcements on bondholders: New evidence from the over-the-counter market*, *Journal of Economics and Business* 107, 2020, paper 105862.

a regulated market or multilateral trading facility. Following an overview of the definition of inside information and issuers' disclosure obligations under Article 7 and 17 of MAR in section 2, an analysis of what generally affects the price formation of corporate bonds was presented in section 3, supported with comparisons to equities. It was found that at least five factors generally influence the pricing of bonds as financial instruments: *the terms of the bond*, *credit risk* (broken down into *probability of default* and *loss given default*), *events affecting the economic rights of bondholders such as mandatory redemption*, *mandatory exchange of securities* and *changes in terms* (call risk), *interest rate risk* and *liquidity risk*.

In section 4, a number of concrete examples of when inside information may generally be assumed to arise in the bond market was then discussed based on these factors. The examples concern *changes in credit risk*, *changes in credit ratings*, *bond buy-backs* and *offers of voluntary exchange of securities*, *mandatory exchange of securities*, *changes of bond terms*, *breach of the terms*, *changes in seniority*, and finally *control changes* and *delisting events*. The analysis in the article shows that while it is sometimes argued among practitioners that inside information rarely arises in the bond market due to the nature of the bonds as fixed income instruments (differing from "open contract" equities), this is not quite true, and the requirement for a bond issuer to disclose inside information is likely more far-reaching than is sometimes assumed.⁵⁷ Hopefully, the article contributes somewhat to clarifying the application of MAR for bond issuers, both in terms of how Articles 7 and 17 should generally be applied and understood by bond issuers, and in terms of how the rules should be applied in a number of specific situations as a starting point.

57 See for instance Bafin, *Issuer Guidelines Published by the Federal Financial Supervisory Authority: Module C: Requirements Based on the Market Abuse Regulation (MAR)*, 2020, p. 22.