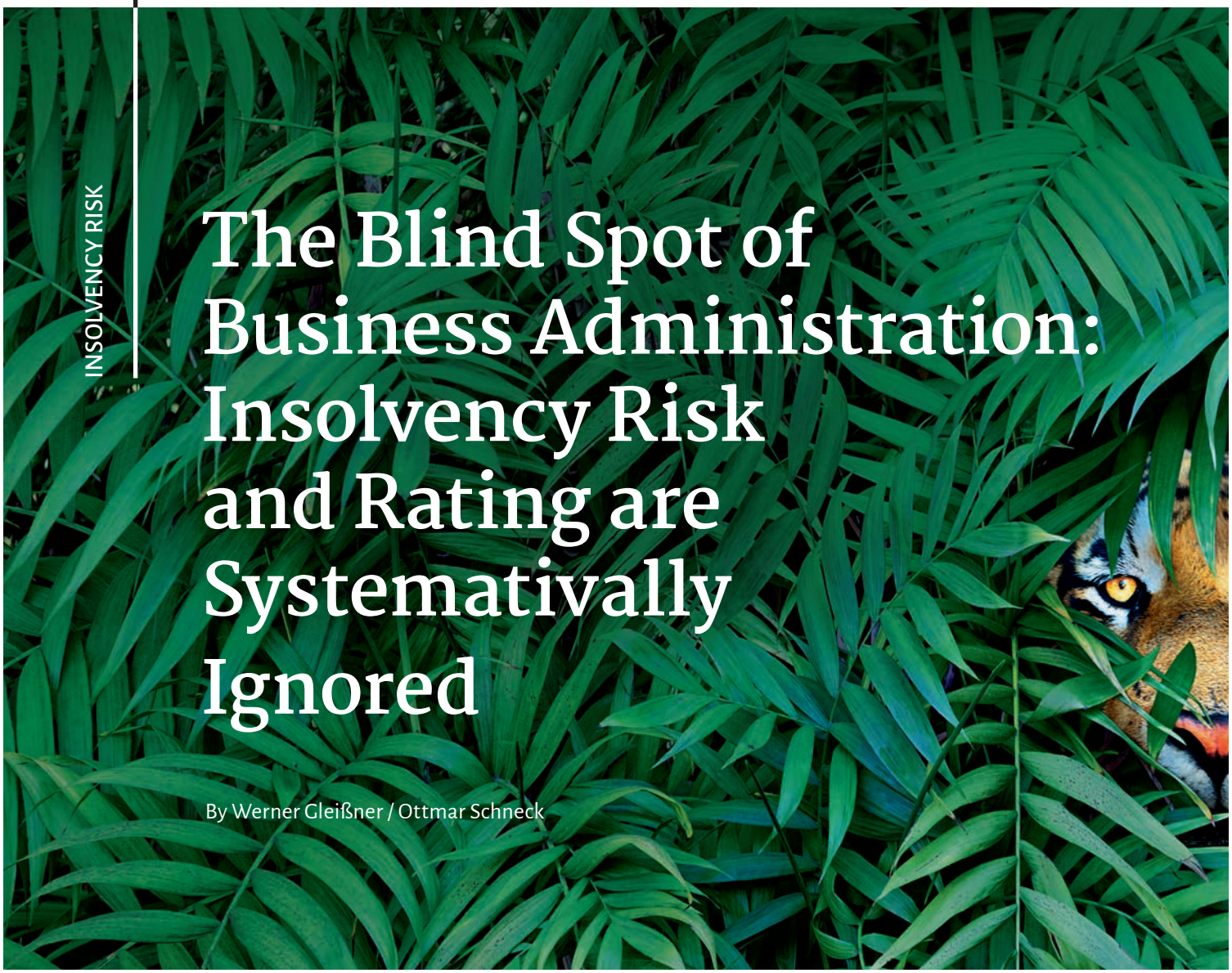

The Blind Spot of Business Administration: Insolvency Risk and Rating are Systematically Ignored

By Werner Gleißner / Ottmar Schneck

RMA

The rating is possibly the most underestimated information in business administration and practical management. One can speak of a "blind spot" of business administration, which can have catastrophic consequences for individual companies and the entire economy, and which can be explained primarily with psychological reasons. Practical business management is just as affected as technical literature, scientific literature, and management training. And despite experiences such as the economic and financial crises of 2008/2009 and 2020, which demonstrated the importance of a good rating and the effects of incorrect rating assessments, little has improved in this area (yet).

Introduction and Formulation of the Problem

It should be noted that, apart from the rating as a whole, the topic of risk and uncertainty still receives little attention in business administration, especially in controlling, which at least helps to explain why the special risk expressed by the rating - the insolvency risk - receives particularly little attention.[1] In this article it is first explained at which points rating and probability of insolvency are important in business administration. Starting from a brief outline of the development of rating as a niche discipline, the reasons for the little attention paid to ratings in business management research and practice, as well as the resulting implications, are outlined.

The Significance of Rating and Insolvency Risk in Business Administration

Why is the rating, or rather the probability of insolvency expressed by a rating grade, perhaps the most important key figure in business management?

First, the probability of insolvency is the strategic indicator that operationalizes the most important goal for most companies, especially family businesses: the survival of the company. The probability of survival is nothing more than one minus the probability of insolvency. Thus, the probability of insolvency belongs in every strategic key figure system (such as a balanced scorecard) as a top indicator.

The German legislature has also de facto set the probability of insolvency as the top indicator for risk management. The Law on Control and Transparency[2] calls for the early detection of "developments that could jeopardize the company's existence".[3] These possible developments that could jeopardize the company's existence generally result from the combination effects of several individual risks, which makes it necessary to aggregate the risks in the context of corporate planning (risk aggregation).[4] Here, two links to the rating arise: First of all, it is clear that any extremely "favorable" combination of individual risks can endanger the existence of any company. Companies without any conceivable development that could endanger their existence are therefore impossible (and corresponding statements in the annual reports of some companies are always wrong). In risk management, the probability of such a "development threatening the company's existence" and the "degree of threat to the company's existence" must be considered accordingly. The degree of threat to the continued existence of the company as the top indicator in risk management can of course directly be indicated by the probability of insolvency and thus by the rating. At least since Basel II, it has also become clear that corporate crises and developments threatening the company's continued existence usually do not result from over-indebtedness, but rather from illiquidity. And a (threatening) illiquidity of companies, to which the Insolvency Act refers as well, occurs when, through the effect of risks, (1) minimum rating requirements are violated or (2) credit agreements (covenants) are breached, resulting in the termination of a loan. Thus, in order to be able to identify possible developments that could jeopardize the company's existence in the first place, as required by law, it is necessary to assess the impact of risks and their combination effects on the future corporate rating. Risk management without reference to the rating does not meet the legal requirements and is economically pointless.

„The German legislature has also de facto set the probability of insolvency as the top indicator for risk management."

The probability of insolvency expressed by the rating as an indicator of the so-called "insolvency risk"[5] is also a value driver that has been overlooked in company valuation, strategy evaluation and value-oriented management until now. Both in business valuation and value-based management concepts (e.g. based on Economic Value Added, EVA) it is still implicitly assumed that companies will certainly exist forever.

Summary

Rating and insolvency risk are of fundamental importance in business administration. In the real world there are rating and financing restrictions that lead to insolvency and the probability of such insolvency is essential e.g. for business valuation or financing decisions. Until now, both aspects have received too little attention in business administration, both in theory and in practice.

However, insolvency statistics and data on the expected life span of companies show that this is frequently not the case. It is therefore often a serious valuation error to unthinkingly assume the eternal existence of a company when determining the compa-

„Risk management without reference to the rating does not meet the legal requirements and is economically pointless."

Prof. Dr. Werner Gleißner

Is a member of the executive board of the FutureValue Group AG in Leinfelden-Echterdingen and a honorary professor of Business Administration, esp. Risk Management at the TU Dresden. He is a member of The International Association of Controllers (ICV) and of the advisory board of the Risk Management & Rating Association e. V.
w.gleissner@futurevalue.de

ny value or other value-oriented key figures (especially when calculating the terminal value of the continuation phase). Although the lifespan of a company is not restricted, it still has a finite expected value. The expected lifetime of a company results directly from the probability of insolvency. The probability of insolvency expressed by the rating determines the expected value of earnings and cash flows required for the valuation, as well as its long-term development over time. In the long term, the probability of insolvency largely has the effect of a "negative growth rate" of the expected earnings or cash flows. Even small changes in the probability of insolvency have a correspondingly major impact on the value of the company as a performance measure and decision-making criterion in value-based management. Even the usually listed companies with a value-oriented management understanding, should consider these value drivers in their decision-making calculations accordingly and record them as key controlling figures. However, not (only) the current probability of insolvency is relevant for the valuation, but also a forecast of the future development of the probability of insolvency, depending on (1) the earnings expected in the future according to planning, (2) the risk coverage potential (equity and liquidity) and (3) the aggregated earnings risks.[6]

For the sake of completeness, it should be noted that in a real imperfect market, insolvency risks also influence the standard for the expected return of a company, business unit or project (the cost of capital rate). [7]

In many companies with value-based management, the probability of insolvency expressed by the rating will be significant not only in the assessment of the risk-return-profile of possible courses of action, but also as an "auxiliary condition" (see safety-first-concept[8]). Due to the above-mentioned legal requirements from risk management alone, many company managements will not only want to recognize possible developments that could endanger the company's existence, but also to avoid them. Minimum requirements for the security of the company as a going concern can be formulated as a minimum requirement for the future company rating (even in potential risk-induced stress scenarios), which is covered in the new "risk-bearing capacity concepts".[9]

It is worth mentioning that the consideration of the impact of business decisions - e.g. investments, acquisitions, or changes in strategy - on the future rating, is not only economically reasonable, but also required by law. The so-called "Business Judgement Rule" formulated in Section 93 of the German Stock Corporation Act requires the Executive Board to verifiably obtain "appropriate information" before making a business decision.[10] When a decision is made under risk or uncertainty, this of course means that information on the risks associated with the decision is required in any case. And among this risk information, information on the risk of insolvency - the rating - naturally has a particularly high priority, as is also clarified by case law.

Finally, the rating is also of fundamental importance for a number of other individual operational decisions. As is well known, the rating determines the financing conditions (especially interest rates on borrowed capital and the borrowing costs, which should be distinguished from these[11]). Accordingly, the e.g. "Principles of Proper Planning" say, that planning the future interest expenses without a forecast of the rating on which they are based is not "proper". The entire financial planning, especially the financial structure planning, is also not reasonably possible without reference to rating (and risk analysis or risk aggregation). In a real, imperfect capital market with rating and financing restrictions, the well-known Modigliani-Miller-theses do not apply. A company's need for equity - and thus its financing structure - is dependent on (1) the aggregated earnings risk and (2) the planned target rating. Higher corporate risks and higher requirements for the security of the company's existence, i.e. the rating grade, lead to a greater need for equity capital. A sound assessment of the financing structure in the finance departments of companies, without reference to the rating, is correspondingly senseless.

The list of significant issues related to rating could be expanded (consider that e.g. companies with a weak rating become unattractive for employees oriented towards security or customers). But even the core topics summarized here already show that sound business management without concrete measurement of the current rating and the forecast of the future rating - in various future scenarios that are possible depending on the risk - is simply not sensible. The question therefore arises as to why the central key figure of business administration does not enjoy the status it deserves, neither in the practice of business management, nor in literature and education.

The History of the Rating

As shown here, the rating, or the probability of insolvency or default expressed by it, is of great relevance in business management, but it has not been adequately taken into account to date. Of course, ratings still have their significance. However, this is limited to the narrow field of assessing debt capital positions, such as loans or bonds, from the perspective of creditors.[12] Theory, methods and practice of rating have thus, in a sense, developed in a niche of business administration and the link to other subject areas has hardly been established so far. The historical development of rating is briefly outlined below.

It may also be partly explained by the history of rating, that even today, rating and rating methods are usually only marginally considered in business administration

and business management, despite the importance outlined here. Ratings and rating methods are not derived from a business theory, but have largely developed "independently".[13] Although it has always been a concern of creditors to assess whether a lender will repay its liabilities, the origin of today's ratings can be traced back primarily to the 19th century and the USA. With the high financing requirements of the new railroad companies, a large, anonymous, and rather opaque capital market emerged there. To finance the high investment volumes for rail construction, the railroad companies issued shares and bonds. To be able to compare the creditworthiness of the bond issuers and ultimately assess the interest terms of the bonds, ratings were created. A systematic and structured description and assessment of the financial situation of the railroad companies began.[14] The three rating agencies Moodys, Standard & Poor's and Fitch Ratings, which still dominate today, all emerged in the first quarter of the 20th century, and with their ratings contributed to making the loans of companies and other borrowers more comparable and assessable with regard to their default risk. The quality of the ratings offered was, and is, particularly decisive for the reputation and success of the rating agencies. For this reason, all rating agencies have worked continuously on improving their rating procedures. Of central importance for the granting of loans, also for medium-sized companies, are ratings with the so-called Basel-II-regulations (valid since 01.01.2007). As a measure for the assessment of debt-capital from the perspective of creditors, however, ratings have remained primarily a topic for the debt capital market and the players active in this field (such as credit institutions and the rating agencies).

Why is rating given little attention in practice and research in business studies? Obstacles and implications

As shown above, the rating is highly relevant in many areas of business administration, research, and practice, but is still frequently ignored. One must ask oneself why this is the case. It is certainly not because in the "niche rating" itself no adequate methods and scientifically based concepts have been developed so far. As explained above, rating and insolvency forecasting procedures can look back on a long history, and there is a multitude of powerful methods that allow a forecast of default and insolvency probability.[15] The developed methods, which are used by credit institutions in particular, are subject to constant quality assurance, and since the economic and financial crisis of 2008/2010 rating agencies have regularly requested validation studies of the methods they use. The probability of insolvency and default of a company is therefore an easily measurable variable, that could be used for various business management procedures outlined above. This applies irrespective of the known fact that, from a scientific point of view, the rating procedures used in practice naturally also show further potential for improvement, especially with regard to the recording of the risks to which companies are exposed in the future.[16] The rating procedures, which are primarily based on historical financial figures, and which usually record more qualitative supplemental information, e.g. on the strategic positioning of a company, implicitly take into account those risks that occurred in the last available annual financial statements - but not those risks that will occur in the future. Simulation-based rating procedures based on a Monte-Carlo-simulation of the risks in relation to corporate planning are recommended. Nevertheless, the empirical validation steps regularly show, that the probability of insolvency is a well-founded information available about a company, that can be used for the business management issues outlined here.

So it is certainly not due to a lack of quality of the estimators of the probability of insolvency that this information sees little use in other business management issues.[17] Then which reasons are relevant for the deficits pointed out? Apart from the history, there are probably three main problem areas to be considered here:

1. Much of traditional business administration, including finance and business valuation theory, is based on the neoclassical theory of perfect markets. Well-known is, for example, the Modigliani-Miller-theorem, according to which, if taxes are neglected,

Prof. Dr. Ottmar Schneck

Is the rector and managing director of the SRH Fernhochschule The Mobile University, Riedingen and a member of the advisory board of the Risk Management & Rating Association e. V. He is a foundation board member of non-profit foundations, writer of textbooks like the bestseller Lexikon der BWL, speaker and coach in companies, developer of simulation games and an expert on bank regulation in national and international organizations.
ottmar.schneck@mobile-university.de

the debt ratio of a company is irrelevant. The Capital Asset Pricing Model (CAPM), which is based on the hypothesis of perfect markets, is used to derive the cost of capital and company values.[18] However, it follows from the theory of perfect markets that, in the absence of rating and financing restrictions, insolvencies cannot occur at all and that these at least have no effect on the value of the company.[19] Anyone who believes in the unrealistic theory of perfect markets, without financing restrictions and with information that is widely available free of charge, does of course not need to concern themselves with insolvency risks and insolvency forecasting or rating procedures. Accordingly, the topic is ignored in a considerable part of business management literature, is hardly addressed in business management education, and is thus underestimated in its practical importance. It is only in recent years that the significance of insolvency risk has been addressed, e.g. for business valuation, and thus also for value-oriented corporate management. [20]

2. Many of the economists working in practice and also in research lack an adequate sound knowledge of rating and insolvency forecasting procedures. This is largely a consequence of 1. Without knowledge of the procedures that can be used to derive the probability of insolvency of a company, insolvency risks, for example, are not adequately considered by valuation experts in the valuation of a company. The insolvency risk is a subject area which, like the overall topic of uncertainty and risk, is neglected in business management training and consequently also in practice.

3. Finally, psychological aspects are also relevant for the explanation. People have great difficulty in adequately dealing with the stochastic concept of "risk". In psychology this is referred to as risk blindness. People tend to focus only on their desired future scenario and to ignore risks that may lead to other developments. It is particularly unpleasant to think about the possible failure of the company, so this possible future scenario is not considered.[21] People also have great difficulty in adequately assessing risks (distortion of risk perception). Particularly risks with a low probability of occurrence, such as the risk of insolvency, can hardly be grasped intuitively without adequate business-management and statistical methods. They lie outside of the usual personal experience. The third facet of risk blindness is, that people cannot adequately consider risk information in their decisions without business management methods. Accordingly, for example, information about the change in the probability of insolvency, e.g. as a result of an acquisition in a company itself, is intuitively not incorporated in the decision-making process. It is not considered that even a small change in the probability of insolvency per year due to the risks assumed, has a significant impact on the value of the company.

„Theory, methods and practice of rating have thus, in a sense, developed in a niche of business administration and a link to other subject areas has never been established."

The influence from the neoclassical theory of perfect markets, the deficits in general business education and the pronounced psychological problems of people in dealing with risks in general and with insolvency risk in particular, explain why rating and insolvency risk receive little attention despite their economic relevance. As shown above, the implications are serious: failure to consider the risk of insolvency ultimately leads to errant business decisions.

This raises the question of what needs to be done to ensure that the subject area of rating and insolvency risk is paid adequate attention in the theory and practice of business administration. Due to these considerations the following starting points appear important:

1) The paradigm of market perfection should (finally) be abandoned in business research, especially also in publications in scientific journals. Real rating and financing restrictions should generally be considered in scientific publications, e.g. on business valuation and financing theory. Of course, this is only possible if the editor and reviewer are sensitized to the importance of this topic (to which this article might contribute a little bit).

2) For practical implementation, it is vital that the significance of rating and probability of insolvency is anchored in the standards that are essential for practice. This means for example that
   – the probability of insolvency is anchored in risk management standards as the key indicator of risk management and as a measure of the "degree of threat to the company's continued existence",[22]
   – the necessity of the estimations and consideration of the insolvency probability for an appropriate enterprise evaluation is stressed in standards for the enterprise evaluation, like e.g. the IDW S1,[23]
   – the "going-concern-premise" relevant to accounting and auditing is clearly linked to the probability of insolvency (up to what probability of insolvency of a company can one assume[24] "going-concern"[25]? and
   – the probability of insolvency becomes the central parameter for assessing the ability of companies to restructure.[26]

3) Finally there is a need to raise awareness of the importance of rating and the probability of insolvency through more communication. Publications such as

this one contribute to this, as does the consideration of the topic as a major special case of the broader subject area of "risk" at conferences (e.g. in Germany at the conference of the Schmalenbach Society, the Controller Congress of the International Association of Controllers (ICV), the annual conference for all valuation professionals of EACVA and the annual conference of the RRMA).

Conclusion

Rating and probability of insolvency are of fundamental importance in business administration. In the real world, there are rating and financing restrictions that lead to insolvency and the probability of such an insolvency is essential e.g. for business valuation or financing decisions. Up to now, both aspects have received too little attention in business administration, both in theory and in practice. The reason for this is, on the one hand, the fact that large parts of today's business administration are based on the neoclassical paradigm of perfect markets, which does not know any rating and financing restrictions and thus no insolvencies. Rating theory and rating methods, which have developed in a niche of lending decisions, are accordingly insufficiently linked with other areas of business administration. This is certainly also because people tend to dismiss risks in general, and the insolvency risk in particular. A sensitization for the importance of the probability of insolvency, especially in "entrepreneurial decisions" (§ 93 AktG), is necessary. In order to do justice to the importance of the topic in business management practice, the topic should be given consistent attention in scientific literature (a publication based on the hypothesis that financial resources are simply available without restriction and that insolvencies cannot occur is unrealistic). This, in turn, is an important basis for ensuring that the topics of rating and the probability of insolvency are adequately considered in business management education and in degree programs. ■

Bibliography

Adam, S. (2007): Das Going-Concern-Prinzip in der Jahresabschlussprüfung, Wiesbaden.

Baule, R. (2019): The cost of debt capital revisited, in: Business Research, Vol. 12, No. 2 (December 2019), p. 721-753.

Behringer, S./Gleißner, W. (2018): Die Unternehmensplanung als Grundlage für die Unternehmensbewertung, in: WPg, 71st year, Issue 05/2018, p. 312-319.

Bemmann, M. (2007): Entwicklung und Validierung eines stochastischen Simulationsmodells für die Prognose von Unternehmensinsolvenzen, dissertation, TU Dresden.

Blum, U./Gleißner, W./Leibbrand, F. (2005): Stochastische Unternehmensmodelle als Kern innovativer Ratingsysteme, in: IWH Diskussionspapiere, No. 6/2005, download at: https://www.econstor.eu/bitstream/10419/23745/1/6-05.pdf (accessed on 02.07.2020).

Büschgen, H. E./Everling, O. (2007): Handbuch Rating, 2nd ed., Gabler Verlag Wiesbaden.

Coenenberg, A./Haller, A./Schultze, W. (2016): Jahresabschluss und Jahresabschlussanalyse, 24th ed., Schäffer Poeschel, Stuttgart.

Cooper, I. A./Davydenko, S. A. (2001): The Cost of Debt, available at SSRN: http://ssrn.com/abstract=254974 (accessed: 02.06.2020).

Dempsey, M. (2013a): The Capital Asset Pricing Model (CAPM): The History of a Failed Revolutionary Idea in Finance?, in: Abacus, vol. 49, p. 7-23.

Dempsey, M. (2013b): The CAPM: A Case of Elegance is for Tailors?, in: Abacus, vol. 49, p. 82-87.

Dorfleitner, G./Gleißner, W. (2018): Valuing streams of risky cashflows with riskvalue models, in: Journal of Risk, Vol. 20, No. 3 (February 2018), p. 1-27.

Essler, W./Kruschwitz, L./Löffler, A. (2005): Wie sind Unternehmen zu bewerten, wenn ihr Verschuldungsgrad nicht in Markt-, sondern in Buchwerten gemessen wird?, in: Betriebs-Berater, 60. year, issue 11, p. 595-600.

Everling, O./Schneck, O. (2004): Das Rating ABC, Wiley.

Fernández, P. (2017): Is it Ethical to Teach that Beta and CAPM Explain Something?, available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2980847 (accessed on 02.07.2020).

Franken, L./Gleißner, W./Schulte, J. (2020): Insolvenzrisiko und Berücksichtigung des Verschuldungsgrads bei der Bewertung von Unternehmen – Stand der Diskussion nach Veröffentlichung des IDW Praxishinweises 2/2018, in: Corporate Finance, Nr. 03-04 from 30.03.2020, p. 84-96.

Friedrich, T. (2015): Unternehmensbewertung bei Insolvenzrisiko (Betriebswirtschaftliche Studien), Peter Lang, Frankfurt.

Füser, K./Gleißner, W. (2005): Rating-Lexikon, Beck im dtv Verlag München.

Füser, K./Gleißner, W./Meier, G. (1999): Risikomanagement (KonTraG) – Erfahrungen aus der Praxis, in: Der Betrieb, 15/1999, p. 753-758.

Gleißner, W. (2002): Wertorientierte Analyse der Unternehmensplanung auf Basis des Risikomanagements, in: Finanz Betrieb, issue 7-8/2002, p. 417-427.

Gleißner, W. (2006a): Risikogerechte Kapitalkostensätze als Werttreiber bei Investitionen, in: ZfCI – Zeitschrift für Controlling und Innovationsmanagement, 4/2006, p. 54-60.

Gleißner, W. (2006b): Risikomaße und Bewertung, three-part series, in: Risikomanager, Teil 1 – Grundlagen 12/2006, p. 1–11; Teil 2 – Downside-Risikomaße 13/2006, p. 17–23; Teil 3 – Kapitalmarktmodelle 14/2006, p. 14–20.

Gleißner, W. (2010): Unternehmenswert, Rating und Risiko, in: WPg, issue 14/2010, 63rd year, p. 735–743.

Gleißner, W. (2011): Risikoanalyse und Replikation für Unternehmensbewertung und wertorientierte Unternehmenssteuerung, in: WiSt, Issue 7/2011, p. 345–352.

Gleißner, W. (2014): Kapitalmarktorientierte Unternehmensbewertung: Erkenntnisse der empirischen Kapitalmarktforschung und alternative Bewertungsmethoden, in: Corporate Finance, issue 4/2014, p. 151–167.

Gleißner, W. (2015): Controlling und Risikoanalyse bei der Vorbereitung von Top-Management-Entscheidungen – Von der Optimierung der Risikobewältigungsmaßnahmen zur Beurteilung des Ertrag-Risiko-Profils aller Maßnahmen, in: Controller Magazin, issue 4/2015, p. 4-12.

Gleißner, W. (2017a): Grundlagen des Risikomanagements, 3rd edition, Vahlen Verlag München.

Gleißner, W. (2017b): Risikomanagement, KonTraG und IDW PS 340, in: WPg, issue 3/2017, p. 158-164.

Gleißner, W. (2017c): Das Insolvenzrisiko beeinflusst den Unternehmenswert: Eine Klarstellung in 10 Punkten, in: BewertungsPraktiker Nr. 02 f. 26.05.2017, p. 42-51.

Gleißner, W. (2017d): Was ist eine „bestandsgefährdende Entwicklung" i.S. des § 91 Abs. 2 AktG?, in: Der Betrieb Nr. 47 on 24.11.17, p. 2749-2754.

Gleißner, W. (2018): Risikomanagement 20 Jahre nach KonTraG: Auf dem Weg zum entscheidungsorientierten Risikomanagement, in: Der Betrieb on 16.11.2018, issue 46, p. 2769-2774.

Gleißner, W. (2019): Insolvenzrisiko, Rating und Unternehmenswert, in: WISU, issue 6/19, p.692-698.

Gleißner, W./Haarmeyer, H. (2019): Die „bestandsgefährdende Entwicklung" (§ 91 AktG) als „Tor" in ein präventives Restrukturierungsverfahren, in: ZInsO, issue 45/2019, p. 2293-2299.

Gleißner, E./Rieg, R./Vanini, U. (2020): Risikoblindheit im Controlling und wie man sie überwindet. Integration von Risiko-Informationen in Controlling und Management (will be published soon).

Gleißner, W./Wingenroth, T. (2015a): Rating und Kreditrisiko Teil 1, in: Kredit & Rating Praxis, issue 5/2015, p. 14-18.

Gleißner, W./Wingenroth, T. (2015b): Rating und Kreditrisiko Teil 2, in: Kredit & Rating Praxis, issue 6/2015, p. 19-22.

Knabe, M. (2012): Die Berücksichtigung von Insolvenzrisiken in der Unternehmensbewertung, EUL Verlag, Lohmar.

Lahmann, A./Schreiter, M./Schwetzler, B. (2018): Der Einfluss von Insolvenz, Kapitalstruktur und Fremdkapitalfälligkeit auf den Unternehmenswert, in: ZfbF, 70th year, issue 1-2 (March 2018), p. 73-123.

Kruschwitz, L./Lodowicks, A./Löffler, A. (2005): Zur Bewertung insolvenzbedrohter Unternehmen, in: Die Betriebswirtschaft, 65th year, issue 3, p. 221-236.

Nickert, C./Nickert, A./Kühne, M. (2019): Prognosen im Insolvenzrecht. In: KTS – Zeitschrift für Insolvenzrecht, edition 1, p. 29-65.

Risk Management Association e. V. (RMA) (Hrsg.): Managemententscheidungen unter Risiko, erarbeitet von Werner Gleißner, Ralf Kimpel, Matthias Kühne, Frank Lienhard, Anne-Gret Nickert und Cornelius Nickert, Erich Schmidt Verlag Berlin, 2019.

Rossi, M. (2016): The capital asset pricing model: a critical literature review, in: Global Business and Economics Review, issue 5/2016, p. 604-617.

Saha, A./Malkiel, B.G. (2012): DCF Valuation with Cash Flow Cessation Risk, in: Journal of Applied Finance, Vol. 22, No. 1, p. 175-185.

Schneck, O. (2008): Rating: Wie Sie Ihre Bank überzeugen, 2nd ed., Beck im dtv.

Schüler, A./Schwetzler, B. (2019): Verschuldung und Unternehmenswert – Anmerkungen zum IDW Praxishinweis 2/2018, in: Der Betrieb, issue 32/2019, p. 1745-1750.

Weber, M./Krahnen, J. P./Voßmann, F. (1998): Risikomessung im Kreditgeschäft: Eine empirische Analyse bankinterner Ratingverfahren, in: ZfbF, special issue 1998, p. 117–142

Footnotes

1 See an overview from Gleißner et al., 2020.

2 See Füser et al., 1999; Gleißner, 2017b and 2018.

3 And this applies both to public limited companies and to the "spillover effect" of other corporations as explained in the explanatory memorandum.

4 See Gleißner, 2017a und 2017b.

5 See Gleißner, 2010, 2017c and 2019; Franken et al., 2020; Knabe, 2012.

6 See Gleißner, 2002.

7 For the dependence of the cost of capital on earnings risk, specifically the concept of "rating-dependent" cost of equity, see Gleißner, 2006a, 2011 and Dorfleitner/Gleißner, 2018.

8 Gleißner, 2006b.

9 The risk-bearing capacity concepts required by e.g. IDW PS 340 (2020) and DIIR RS No. 2 (2018) indicate the "distance" between the current situation of the company and a possible "development threatening its continued existence" by means of suitable key figures. A second key figure indicates the probability that the risk-bearing capacity will fall below zero, i.e. that a "development threatening the existence of the company" will occur (see Gleißner, 2017d).

10 See Gleißner, 2015 and RMA, 2019.

11 Regarding the decision see e.g. Gleißner, 2017c; Cooper/Davydenko, 2001 and Baule, 2019.

12 See sources for this, Büschgen/Everling, 2007.

13 For basic principles see also Everling/Schneck, 2004; Büschgen/Everling, 2007 as well as Füser/Gleißner, 2005.

14 Such a summary has first been created in 1860 by Henry V. Poor.

15 For a summary see Weber at al., 1998; Schneck, 2008; Bemmann, 2007; Gleißner/Wingenroth, 2015a and 2015b.

16 See Blum et al., 2005; Gleißner/Wingenroth 2015a and 2015b.

17 For example, a backtesting of ratings is common, whereas a comparable quality assurance of company valuation reports is unheard of.

18 For critique and empirical studies see e.g. Dempsey, 2013a and 2013b; Fernández, 2017; Gleißner, 2014; Rossi, 2016.

19 See e.g. Kruschwitz et al., 2005 and Essler et al., 2005.

20 See Gleißner, 2010; Knabe, 2012; Saha/Malkiel, 2012; Friedrich, 2015; Lahmann et al., 2018; Schüler/Schwetzler, 2019; Franken et al., 2020.

21 On the non-observance of the insolvency risk in corporate planning, see Behringer/Gleißner, 2018.

22 This has already been implemented in e.g. IDW PS 340; in DIIR RS Nr. 2

23 See Franken et al., 2020.

24 See Adam, 2007 and also Coenenberg, 2016.

25 See Gleißner/Haarmeyer, 2019.

26 See, for e.g. the requirements and standards for going-concern prognoses, Nickert et al., 2019 and Gleißner/Haarmeyer, 2019.