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Article

Lack of Risk Management at Insolvency Consulting Companies: An Empirical Study in Germany 2024

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Abstract: In the wake of the COVID-19 pandemic, the Russian war of aggression against Ukraine and the resurgence of the Middle East conflict, government measures to support the economy have intervened massively in economic activity and thus influenced the real insolvency situation. This situation creates disruptive conditions in insolvency counselling and requires comprehensive risk management for the strategic safeguarding of internal processes in insolvency counselling companies. Despite a number of academic articles that address a lack of risk awareness in insolvency counselling, there have been no valid statistical surveys on this topic to date. The topic has also been largely ignored in practice. This article presents a study that examines risk management in insolvency advisory companies in the context of government intervention in the global economy from 2020 to 2023. The aim of the research is to assess the necessity and existence of risk management in these companies. A survey of 350 insolvency advisors was conducted between March and April 2024, from which 113 complete data sets could be analysed. The central hypothesis of the research study is that a significant majority of insolvency advisory companies have insufficient risk awareness and do not implement comprehensive risk management strategies. The survey results confirm that risk management is rarely practised and that a well-founded risk awareness is lacking in most consulting companies. It is noteworthy that two-thirds of those surveyed consider the benefits of risk management to be low, although more than half of those surveyed recognise increased risks due to government crisis measures. Ultimately, this study concludes with a recommendation that a standardised EU insolvency regulation could offer the greatest benefits for the insolvency sector, as it would simplify risk management for consultants in all member states.



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Keywords: insolvency; insolvency consulting; insolvency consultant; strategic risk management; compliance; risk analysis; resilience; crisis management; companies; reorganisation; restructuring; COVID-19; financial stability; management strategies; Ukraine conflict; Middle East crisis; supply chains; economic crisis; government intervention

1. Introduction

In economic terms, the 2020s are characterised by emergent shock scenarios due to the COVID-19 pandemic, Russia's war of aggression against Ukraine (Coutinho et al. 2023), the potential threat of attacks on civilian merchant shipping in the Red Sea and Persian Gulf (Berman 2024) and the associated supply chain disruptions, as well as increasing climate catastrophes (United Nations 2023). Shocks and disruptive developments are one of the main causes of companies exiting the market through insolvency in most industries (Hesse and Schneider 2022). Comprehensive state intervention in the economy to secure and stabilise national economies has resulted in increasingly distorted corporate landscapes. Real insolvency events, as they existed before 2020, have led to a decline in insolvencies in many countries, particularly in Europe (Gassen and Kosi 2021; Müller 2021b; Becker 2021; Creditreform 2023a).

In a market economy, insolvencies serve as an indicator of the economic success or failure of companies and have a 'cleansing effect' by eliminating unprofitable, uncompetitive

companies from the market. The market thus cleanses and regulates itself (Gudehus 2015). Insolvencies are therefore a normal phenomenon in every economy (Littich and Sievert 2019; Greve 2019; Müller 2021a; Wälder and Wälder 2017).

The state intervened massively in the economy by providing financial support. These included aid payments for the operating business, tax cuts, short-time working and the suspension of the obligation to file for insolvency (Reinhart 2022). Further measures were taken in 2022 as a result of Russia's war of aggression, as energy imports from the country were reduced (Fehl-Weileder 2022). This has created a situation that is difficult to understand, making it difficult to clearly identify companies at risk of insolvency (Sandqvist and Wollmershäuser 2021). Creditreform's surveys (Creditreform 2023a, p. 2) show that the measures introduced in the course of the emergent situations mentioned above have been successful.

Accordingly, most countries in Western Europe in 2022 (Table 1) were still below the pre-coronavirus level of 2018 or 2019 in terms of insolvency figures.

Table 1. Comparison of the development of absolute insolvency figures in selected European EU member states and non-member states 2018 to 2022, source: Creditreform Wirtschaftsforschung 2023 (Creditreform 2023b).

	2022	2021	2020	2019	2018	Change 2021 in Percent
Belgium	9260	6533	7203	10,598	9878	+41.7
Denmark	7818	8339	5614	8474	7155	−6.2
Germany	14,660	14,130	16,040	18,830	19,410	+3.8
Finland	2656	2473	2135	2597	2534	+7.4
France	41,215	27,470	31,036	51,201	53,887	+50.0
Greece	46	108	102	107	84	−57.4
Great Britain	23,104	14,820	13,298	18,256	18,773	+55.9
Ireland	500	401	575	568	767	+24.7
Italy	7164	9017	7650	11,161	11,259	−20.6
Luxembourg	1054	1199	1199	1263	1195	−12.1
Netherlands	1854	1536	2703	3209	3145	+20.7
Norway	3040	2688	4100	5013	5010	+13.1
Austria	4913	3076	3106	5235	5224	+59.7
Portugal	3869	4770	5000	5071	5888	−18.9
Sweden	7266	6901	7695	7776	7599	+5.3
Switzerland	6799	5127	4893	6009	6878	+32.6
Spain	4755	4098	4097	4464	4131	+16.0
Total	139,973	112,686	116,446	159,832	162,777	+24.2

Looking at Germany in isolation in the statistics, insolvencies fell by an annual average of around 5000 in the period shown. The UK, on the other hand, has seen a massive increase over the same period, which is particularly concentrated in the retail and service sectors (Creditreform 2023b). It can be assumed that Brexit will have a further delayed impact on the British economy after many continental companies have left the UK.

It is not yet possible to estimate when real insolvency activity will return to the individual countries due to further government aid measures in addition to the former coronavirus measures (Sandqvist and Wollmershäuser 2021; Coutinho et al. 2023). However, the number of corporate insolvencies has been rising again since 2023, even if it is still at a low level (approx. 16,000 in 2023). If we compare the years 2014 to 2019 with an average of

20,000 insolvencies p.a. ([Creditreform 2023a](#)), then the real level of insolvencies has not yet been reached.

If an insolvency application is filed despite the state aid measures and reduced insolvency activity, the insolvency advisor is one of the key figures in the management of the company concerned. However, with the increasing ‘dilution’ of financial resources and their utilisation, advisors are increasingly finding themselves in a situation that threatens their own position and can lead to liability risks. This type of ‘dilution’ of operating results and the real economic situation of the company was caused by the state with a temporary suspension of the obligation to file for insolvency and liquidity-supporting aid ([Becker 2021](#); [Creditreform 2023b](#)). In addition, current contribution obligations to the state for social security contributions and tax obligations were deferred ([Hesse and Schneider 2022](#)). During the coronavirus pandemic, the instrument of suspending the obligation to file for insolvency has delayed the de facto insolvency of many companies. Further distortions result from the aid measures due to the Ukraine conflict, which were used particularly in energy-intensive industries and have an inflation-adjusting effect as well as supporting operating costs ([Müller 2015](#)). This results in considerably more work for insolvency advisors in determining the causes and processing when companies become insolvent after the aid measures expire ([Gleißner and Hofmann 2020](#)).

Protecting advisors primarily against liability risks requires comprehensive strategic risk management that can be utilised in their own operational business. Existing mandatory professional indemnity insurance policies offer a certain degree of protection against liability risks, but are only one element of protection ([Rack 2012](#); [Müller 2015](#); [European Parliament and European Council 2019, 2022](#)). Liability amounts are subject to negotiated limits between advisors and insurance companies and require a separate written contractual form ([Diller 2018](#); [Weinbeer 2019](#)). However, the increasing uncertainties surrounding compliance with clients and their financial use of state aid as well as pre-existing financial imbalances result in more risks for insolvency advisors if they (unknowingly) commit these offences. The insurance policies are not always up to date with the current level of security and must be readjusted by the advisors in addition to risk management.

To date, a large number of insolvency consulting companies have not undergone comprehensive restructuring or established strategic management of their own risks. However, this would be necessary in view of the increasing uncertainties and compliance requirements in order to safeguard their own interests ([Weinbeer 2019](#)). There is a research gap in this area. The academic literature does not statistically demonstrate the status of the use and implementation of risk management in insolvency counselling, nor does it offer methodologically sound implementation options specifically for insolvency advisors. Research has so far largely failed to investigate the awareness and practices of insolvency advisors with regard to risk management. Existing approaches in the literature are often limited to assumptions and assertions without statistical support. This thesis thus addresses a significant gap by exploring whether and to what extent insolvency advisors implement risk management practices. The aim of this study is therefore to explore, through empirical surveys, whether an awareness of risk management exists among insolvency advisors and, if so, how they implement it.

The existence of such a research gap is a relevant problem in many European countries due to the situational influences described above ([Coutinho et al. 2023](#)). This problem is explained and discussed in this paper using Germany as an example. In addition, recommendations for the implementation of risk management in insolvency counselling and digital support are presented, which make the relevant economic sector of insolvency counselling more stable in terms of its own risk. The three following **research questions** are to be answered for this purpose:

- (a) *Is risk management necessary and useful in insolvency counselling?*
- (b) *What form does risk awareness take in insolvency counselling?*
- (c) *Is systematic risk management used in insolvency counselling?*

The supplementary aim of the research work is to generate an empirical inventory of the implementation and utilisation of risk management by insolvency advisors. As a sub-goal, the research formulates the presentation of methods and instruments and their implementation for risk minimisation. The empirical stocktaking performed by this research work will identify additional requirements that have not yet been taken into account due to the current situation in the insolvency process.

An empirical study was conducted with German insolvency advisors between March and April 2024 to examine the current status of the implementation and use of risk management by insolvency advisors.

The structure of this article is designed to systematically address the complex issue of risk management in insolvency counselling, to ensure an in-depth examination of the topic and to promote a deeper understanding of the interrelationships within the research field. Section 2 provides a comprehensive literature review that covers both the legal framework and the practical challenges of insolvency management, thereby preparing the ground for the emerging research questions. This in-depth review forms the foundation for the empirical analysis and helps to situate the study within the current research discourse.

Section 3 explains in detail how the data were collected through a survey of insolvency advisors and describes the methodological approach of the study. The research design, the selection of methods, the design of the questionnaire and the selection of respondents are explicitly addressed, as these points are crucial for ensuring the validity and reliability of the study results.

The results of this study are presented in Section 4 and are divided into three parts: Firstly, the established instruments of strategic risk management are considered in Section 4.1, followed by a descriptive analysis of the survey results in Section 4.2 and an inferential statistical analysis in Section 4.3, which examines the data in greater depth. This structuring enables a clear presentation of the findings and their categorisation in the context of the hypothesis testing.

The concluding discussion in Section 5 highlights the implications of the research findings and places them in relation to current economic and legal developments. Recommendations are made for the integration of effective risk management practices in insolvency counselling. In addition, this study concludes with the recommendation that a harmonised EU insolvency regime could offer the greatest benefits for the insolvency sector, as it would simplify risk management for advisors in all member states. This article concludes with a summary of the benefits of the research and outlines future research approaches.

2. Literature Review

There is remarkably little academic research into risk management for insolvency consultants, even though this area is of great importance both academically and economically. Insolvency advisors are not only involved in insolvency proceedings, but also in the restructuring and reorganisation of companies to ensure their viability. Effective risk management within their own practices is crucial to ensure the quality and reliability of their advisory services. These consultants play a central role in promoting economic stability and recovery through the implementation of effective business rescue strategies. Despite this high relevance, as outlined above, there is a significant research gap in relation to insolvency advisors' own risk management strategies, which is particularly evident in the lack of academic literature on risk management by insolvency advisors, as well as papers on digitalisation in risk management for insolvency advisors.

Heesen and Wieser-Linhart (2018) provide a comprehensive introduction to the topic of insolvency law and the course of insolvency proceedings in Germany, shedding light on the risks of insolvency from a business perspective, how they arise and how to deal with them in accordance with the law. Using extensive practical examples, they show company managers preventive options. The presentation of the links between national and EU law in the area of insolvency is particularly valuable. Going into 2021, the second year

of the COVID-19 pandemic, this work presents the current status of insolvency law and procedures. The conclusions for advisory activities can be utilised in such a way that the corporate risks can be adaptively transferred to risk areas and factors for advisory activities. Although treatises such as Heesen and Wieser-Linhart (2018) offer a comprehensive insight into insolvency law and the processes of insolvency proceedings in Germany, they do not address how insolvency advisors systematically manage their own risks. These works shed light on the risks from a business perspective and highlight preventative measures for company management, but lack insights into how insolvency advisors identify, assess and manage their own risks. As Heesen and Wieser-Linhart (2018) explicitly point out that the liability risks for all parties involved in the insolvency process are high and yet are not given intensive attention, the following question arises for the present research:

Hypothesis 1 (H1): *The vast majority of respondents do not have an internal company risk management system as a strategic option for dealing with clients.*

The dissertation by Hefner (2020), published under the title “Legal entities as insolvency administrators? Spain and Germany in legal comparison”, provides a comparative framework for the two nations. In this work, the role of legal entities as insolvency administrators in Germany is analysed in comparison to the Spanish legal system. The dissertation provides a comprehensive account of the duties, obligations and legal basis for insolvency administrators and analyses the differences between the two countries, taking into account the requirements of the respective case law. It is also applicable to broad areas of insolvency counselling and provides a compact overview of risk-based factors that cover both areas of insolvency counselling and administration.

In the area of insolvency advice, Weinbeer (2019) has provided a comprehensive description of the most common risks that lawyers are confronted with in practice. The insolvency law aspects are of particular interest and offer initial approaches to risk detection. In addition, elements for a comprehensive risk management structure were identified, but these only represent a basis. They serve as individual points for a checklist of existing risks, which must, however, be supplemented by the legal changes to the corona phase and the post-phase. There is a lack of risk management and a structured methodology.

In his article “Compliance in law companies”, Wessing (2018) looks at the importance of compliance in law companies and emphasises that this topic is often neglected. The General Data Protection Regulation (GDPR) in particular brings with it complex and unresolved legal issues and can result in high fines in the event of violations. The main topics will be combined with practical examples in which compliance has been neglected. Wessing emphasises the need for law companies, regardless of their size, to have a functioning compliance system in order to benefit from the advantages of such a system in terms of prevention.

In an article in *Anwaltsblatt*, Diller (2018) analysed risk management in law companies in general and found that the topic of risk management is not yet a permanent process support for the majority of law companies. Diller gives an overview of the possibilities of designing and implementing risk management in law companies, focussing on professional errors and liability cases. He discusses the rejection of risks, outsourcing to other specialist lawyers and the basic contractual conditions for minimising risk. As measures to minimise and avoid liability, Diller recommends the use of insurance and open communication between client and lawyer. Although these aspects are only partial and risk management does not explicitly deal with insolvencies, they provide an important basis for our own research and the resulting

Hypothesis 2 (H2): *The vast majority of insolvency consultancies are insufficiently aware of the risks in their own work processes.*

It must be noted that the discussion of risk management and the possibilities of digitalisation have been almost completely omitted from the scientific community. This research

paper therefore aims to provide a basis for recommendations on how risk management can be organised and how digital tools can be used to support risk resilience. It can be assumed that the possibilities of individual law companies and consultancies differ in terms of staffing levels and investment opportunities and that risk management measures are therefore also influenced by this. This results in

Hypothesis 3 (H3): *It is assumed that there are differences due to the size of the consulting companies in terms of risk culture and implementation.*

3. Materials and Methods

In order to close the existing research gap and test the hypotheses formulated in Section 2, this study examines and analyses the specific risk management practices of insolvency advisors. In particular, the legal framework and developments in recent years that influence the practice of insolvency counselling are taken into account. A deeper understanding of these frameworks and their impact on the risk management strategies of advisors is crucial in order to address the current challenges and responsibilities in insolvency counselling.

The treatise by [Littich and Sievert \(2019\)](#) is of particular interest in this context. Littich and Sievert expressly emphasise the special responsibility of the advisor in insolvency proceedings. This responsibility is based on the multidimensional consideration of interests and the existing risk-based factors that involve joint liability. This multidimensionality concerns both the client, the public financial administration and the advisor's own interests. The advisors are largely recruited from the group of lawyers, but also from tax advisors and auditors ([von Oppen 2019](#); [Weinbeer 2019](#)), with corresponding specialisation, who should therefore actually be trained and informed in compliance matters in their specialist area. However, more and more compliance requirements have been added by legislators in recent years ([Mohammadzai et al. 2023](#)). However, [Diller \(2018\)](#) notes for the group of lawyers the following:

“Every lawyer knows the practically unrealisable demands of case law on his diligence and omniscience, which ultimately amount to strict liability regardless of fault. Nevertheless, for most lawyers, ‘risk management’ is limited to ‘paying attention’, effectively monitoring deadlines and reading the NJW [Neu Juristische Wochenschrift; author's note] every week”.

This should have changed over the last four years due to various legal requirements and newly emerging situations.

In response to EU Directive 2019/1023, the StaRUG 2020 was amended. With regard to the obligations that arise for tax advisors, tax agents, auditors, sworn auditors and lawyers under the new law, the risk assessment in StaRUG, Section 102 (2020), stipulates that

“[...] tax advisors, tax agents, auditors, sworn accountants and lawyers who prepare annual financial statements for a client must draw the client's attention to the existence of a possible reason for insolvency in accordance with Sections 17 to 19 of the German Insolvency Code and the associated duties of the managers and members of the supervisory bodies if there are obvious indications of this and they must assume that the client is not aware of the possible insolvency and the associated duties”.

The aim of this new regulation is to give the company in crisis the opportunity to take reorganisation measures, whether in accordance with the StaRUG or otherwise, by means of an early warning. This obligation applies to the aforementioned advisors regardless of the legal form of their client. If the advisor realises that there may be grounds for insolvency, he must ask himself whether the client is also aware of this. The advisor must assess whether the client is in a position to draw the correct legal conclusions from these circumstances. It therefore depends on the client's knowledge of the facts and legal judgement. Only if

the advisor can assume that the client is aware of the possible insolvency as well as his resulting obligations can the advisor waive the reference.

The duty to inform is not limited to the possible existence of a reason for insolvency, but also to the obligations arising from this for the client's managers and supervisory bodies. If the client is obliged to file for insolvency pursuant to Section 15a InsO, he must be informed of this obligation, as well as of the payment prohibitions pursuant to Section 15b InsO. In individual cases, further obligations or prohibition standards may apply. For example, a reference to the insolvency offences under sections 283 et seq. StGB may be necessary. Finally, the advisor should also point out the reorganisation options under the StaRUG.

Compliance with the duty of disclosure by insolvency advisors is of critical importance, as a breach of this duty can result in potential claims for damages by the client. In such a case, the damages to be compensated would have to be measured according to the hypothetical scenario in which the advisor would have informed the client correctly and in good time. This could lead to a different financial situation for the client or a different nature of the insolvency estate. [Bülte \(2018\)](#) emphasises that the most significant areas of risk for insolvency advisors fall into five categories:

- Business with dubious independence;
- Risk transactions;
- Failure to contest or assert claims;
- Transactions below market price;
- Cover-up and concealment measures;
- The management of criminal assets in the insolvency estate.

These identified risk areas highlight the need for strategic risk management that not only ensures compliance with legal requirements, but also minimises the financial and operational risks that can arise from advisory activities. Effective risk management should therefore be an integral part of the advisory practice of insolvency advisors.

A detailed survey was developed to evaluate risk management in insolvency consulting companies, which was designed to collect both qualitative and quantitative data. An empirical study was conducted between March and April 2024, which included a survey of German insolvency advisors. Of the 350 potential participants contacted, 165 responded to the survey. Of these, 113 data sets were determined to be fully usable for analysis, while 52 participants either cancelled the process or only completed a review. The survey consisted of a mix of closed and open-ended questions aimed at gaining an in-depth understanding of risk management practices and the perceived effectiveness of these practices. To ensure the validity and reliability of the results, the questionnaire was rigorously pretested prior to distribution. This pretest included pilot responses from ten insolvency advisors who were not part of the main sample. Feedback from this pretest led to adjustments in the wording of some questions to avoid ambiguity and improve clarity. In addition, a combination of descriptive statistics and inferential statistical methods were used to statistically analyse the survey data. Specific tests such as chi-square tests for categorical data and *t*-tests for continuous variables were used to examine the relationships between the variables and to test the underlying hypotheses of the study.

In the survey instrument, the participants were differentiated in terms of company size. The three determinants included 1–3 consultants (defined as small), 4–10 consultants (defined as medium) and 10 consultants (defined as large). This was essential with regard to Hypothesis 3 of the research approach.

The questionnaire instrument was divided into different thematic blocks, which were considered necessary for answering the research questions and confirming the hypotheses. The topic blocks were divided as follows:

- Perception of the benefits of risk management in the industry and personally.
- Perceptions of increasing risks due to legal measures and support during the pandemic and other influencing factors.
- Utilisation of risk management and specific tools and methods.

- Perceptions of risks and risk-based factors in insolvency counselling.
- Attitudes and plans for risk management in the future.
- Areas in which risk management would be useful.

The structure of the response options was aligned both nominally (descriptive parameters of attributes and properties) and ordinally (parameters for describing importance in scaled rankings).

As no comparable study was found in the existing research literature for the German-speaking or English-speaking world, this approach is considered to be the first survey in the professional group of insolvency advisors for the German-speaking world. The results of this study offer decisive insights into the existing risk management practices of insolvency advisors and show the extent to which the theoretical requirements are implemented in practice.

4. Results

4.1. Established Instruments of Strategic Risk Management

Risk management systems in companies are now considered a standard that is recognised by the vast majority of companies. The standards are determined by various standardised requirements. These include ISO 31000:2018 (ISO 2018) with its comprehensive requirements for certification as well as the Minimum Requirements for Risk Management (MaRisk).

The first version of ISO 31000 was introduced as a standard in 2009 (Sorano and Lombardo 2016). Its basic requirements are designed to ensure that companies undertake to identify, analyse and assess risks in order to obtain certification (Beißel 2017). The individual phases of risk management are determined and analysed using various methods. These include, for example, checklists, SWOT analyses or interviews (internal and expert) in risk identification. Questionnaires or morphology methods can be used analytically. However, there are also creative methods such as brainstorming or the Delphi technique, in which experts respond to risks using questionnaires (Baumann et al. 2016). As a management task, it concerns all areas in which risks are recognised or may occur and is subject to the structured process (Wälder and Wälder 2017) as follows:

- Establishing the context;
- Risk identification;
- Risk analysis;
- Risk treatment;
- Risk avoidance;
- Risk reduction;
- Risk sharing;
- Risk transfer;
- Risk monitoring and review;
- Risk documentation.

Various methods have been developed in research for this purpose, which have proven to be tried and tested and thus established. They have replaced unsystematic risk identification, which was previously based on experience and ‘gut feeling’ (Brauweiler 2019).

In the survey conducted for the research, insolvency advisors were presented with established instruments of strategic risk management, which also exist in the form of digital electronic solutions using software or apps and represent usable instruments in insolvency counselling. An overview of these is presented below:

The Failure Model and Effects Analysis (FMEA) was originally used in the military of the US armed forces (Sorger 2008). It is categorised as a qualitative method and works with ranking scales to determine whether a risk can contribute to the failure of a process (Ebert 2013). The determination is based on the risk priority number, which is the product of the probability of occurrence, significance and probability of detection (Wälder and Wälder 2017). The system, which is based on empirical values, is inductively analysed for possible events as influencing variables of the relevant process in terms of their suitability to trigger chains of risk effects that cause processes to fail. This enables an independent determination

of whether risk-based factors have been omitted from the analysis in previous processes (Hopkin 2017). Ultimately, FMEA is less suitable for risk identification than as a means of holistically documenting, evaluating and managing risks identified in processes (Huth et al. 2017).

Fault tree analysis (FTA) is used for overall systems or processes and runs through them systematically from the origin (Huth et al. 2017). It is also categorised as a qualitative procedure, as is FMEA (Ceritoğlu 2017). Fault tree analysis is used for risk analyses of complex processes. The objectives of FTA are both the identification of causes that can impair a process and the determination of probabilities of occurrence (Wälder and Wälder 2017). The system is based on a simple Boolean system of AND, OR, NOT statements in relation to previous process steps (Müller 2015).

Both procedures can be used to identify the causes of failure and implement suitable countermeasures to prevent this. For insolvency counselling, they are suitable as a preventive measure before actively entering into insolvency proceedings and identify the potential risk moments and factors in the necessary processes and create largely error-free processing (Wälder and Wälder 2017).

A risk matrix, also known as a risk map, is used to determine the urgency of the need for action depending on the risk-based factor. Simple two-dimensional matrices are usually used for this purpose, which are broken down by means of colour coding or numerical evaluation and classification according to the amount of damage in relation to the probability of occurrence (Wälder and Wälder 2017). Extended models of the matrix are based on three-dimensional structures that also incorporate time as a component. The factor of the temporal structure of risk-based factors and their occurrence is included. Within a process, this is necessary to the extent that not only the probability of occurrence is taken into account, but also how quickly an identified risk can have an impact (Brauweiler 2019). Using this three-dimensionality, countermeasures can be developed in such a way that they are already in place at the given point in time before a risk can materialise.

Bow-tie analysis can also be used for risk identification. It holistically presents all causes for a risk-based factor and identifies possible countermeasures to minimise or ideally eliminate the factor (Huth et al. 2017). Hopkin (2017) defines this as follows:

“Preventive controls are relevant to actions that are taken before the event occurs. The nature of detective controls means that they relate to circumstances after the event has occurred”.

It is seen as a further development of FMEA and FTA. However, FMEA and FTA are incorporated into the process as root cause analysis (de Ruijter and Guldenmund 2016). The identified causes can already be minimised in an upstream process with appropriate measures if this appears possible. Otherwise, the measures are developed after the complete determination (Huth et al. 2017).

The value at risk method is specified for the financial impact of risks and risk-based consequences. It not only determines a nominal reduction in value in the form of losses, but can also approximately describe their probability (Romeike 2017). Such systems can be helpful for insolvency counselling in the form that certain risks can result in liability. The determination of such a value and the probability of occurrence due to misconduct that was not previously considered as a risk can show which risks correlate with certain amounts of loss (Wälder and Wälder 2017). The elimination of these risk factors can be of essential importance for insolvency counselling if personal liability would become effective due to personal debt.

The Ishikawa diagram, also known as the fishbone diagram, was developed in the 1980s by the Japanese statistician Kaoru Ishikawa (Huth et al. 2017). It is used to determine the cause of a risk-based factor that is specified as a target definition. Various influencing parameters are analysed, which in themselves can influence the factor. Parameters can be people, methods or processes, which can have different determining effects on the factor within their radius of influence. It should be noted that the Ishikawa diagram is useful for determining commonly occurring risks and risk-based factors. This approach

should not be considered useful for unusual factors (Wälder and Wälder 2017). However, it helps to analyse identified risks in the normal working environment and to minimise them with suitable methods and measures in a continuous improvement process (Kuntsche and Börchers 2017). From this perspective, it is therefore also suitable for use in risk management by insolvency advisors.

4.2. Descriptive Analysis of the Results of the Research Survey

All the results obtained from the survey are presented by first explaining them descriptively. All the results can be viewed graphically in an Appendix A attached to the research paper.

The results obtained are distributed across the predefined size definitions of the insolvency consultancies as shown in the Appendix A with the survey tool Survio®. The Appendix A also contains the following Table 2, which shows the distribution of the participating insolvency advisory companies according to the size of the advisory team and which enables a statement to be made on the assumption made with Hypothesis H3.

Table 2. Shares of participating insolvency advisory companies by size of advisory team.

Option	Answers	Ratio
1 to 3 advisors	39	34.51%
4 to 10 advisors	41	36.28%
More than 10 advisors	33	29.2%

This gives an approximately equal distribution of the three size classes, which allows statements to be made on Hypothesis 3.

The perception of the benefits among the survey participants appears interesting in the results obtained. Recognising a high benefit in risk management was at 61.9%, with a low benefit at only 15%. Only one participant sees no benefit at all in risk management. For their own company, the approval is even slightly higher at 67.3%. A total of 15.9% see little benefit for themselves and two participants see no benefit at all. This suggests a high level of risk awareness, but proved to be misleading in the subsequent survey.

When asked about the estimation framework of insolvency consultancies that utilise systematic risk management, 68.1% of participants believe that only a quarter do so. A total of 24.8% tend towards a quarter to almost 50%. This shows that although there is a perception of benefit, only a few insolvency consultancies are expected to use it effectively and actively, which may also include their own consultancy.

The increase in uncertainties and risk-based factors since the pandemic is recognised by a majority of 60.2% as significantly (39.8%) or massively (20.4%) higher. A total of 24.8% recognise a slight increase in the requirements for insolvency advice. Around 11% recognise a decrease or no influence at all. The results are similar for changes in government legislation, which around half recognise as having a significant (24.8%) or massive (24.8%) influence on their work. A total of 33.6% see a minor influence and a total of 15% are of the opinion that the influence is minor or non-existent.

Half of the participants also see a significant (29.2%) or massive (21.2%) influence on their work as insolvency advisors when it comes to the financial aid that has led to a distortion of the insolvency situation. A total of 29.2% recognise a minor influence and a total of 23.9% recognise a decrease or no influence.

The results suggest that the government measures are still having an impact on the insolvency process and are influencing the advisory activities of insolvency advisors by making the auditing process more difficult. However, a third no longer see any influence here, especially in terms of assistance, as most of the coronavirus aid will expire in 2021 and will no longer have such a strong impact on the balance sheet. However, this group still forms a minority of the participant cohort.

When looking at the expectations for insolvency figures over the next three years, a majority of 55.8% believe that the number of insolvencies in Germany will increase massively. A total of 36.3% expect a slight increase. Only 1.8% are of the opinion that the figures will decline and 5.3% expect a figure similar to 2023.

With regard to the use of risk management (regardless of whether systematic or non-systematic) in insolvency counselling, the second thematic block asked questions directly about specific use, areas of use and methods and instruments. Multiple answers were permitted here, as it can be assumed that different areas are considered in the individual counselling sessions.

In terms of the areas in which risk management is used, participants most frequently cited compliance with deadlines (59.3%) as being of particular importance to them. This is followed by compliance with data protection and information security with around 54%. A total of 40.7% pay increasing attention to compliance requirements in the consulting process. Little attention is paid to individual case analyses and risks arising from the client–advisor relationship (25.6% individual case analyses and 15% client–client relationship). Around 19% of participants state that they do not pay particular attention to any area.

This correlates with the results of the use of standards and norms found in insolvency counselling.

ISO 9001:2015 (ISO 2015) is the most frequently cited quality standard (50.4%). ISO 9001, which has been in existence since 1987, standardises management, performance and support processes for quality assurance for consumers and employees in the company. The 2015 revision introduced the involvement of competent persons, a process-orientated approach, a fact-based decision-making process and relationship management (Kuntsche and Borchers 2017; Hopkin 2017; Grabner 2019).

In second place (35.4%) is compliance with data protection. Measures against the Money Laundering Act follow in third place (approx. 30%). The standards for quality management and data protection are older in terms of requirements and are now almost fully utilised throughout the corporate world. There are far fewer norms and standards in use for risk management. Minimum requirements for risk management are stated by 18.6%, and only <9% use ISO 31000:2018 for risk management. A total of 21.2% do not use any standards or quality seals at all, which is rated as high in comparison. The weighting of norms and standards is therefore very low for the implementation and use of systematic risk management in insolvency consultancies and demonstrates a low risk culture.

This is also evident in the use of the specific tools that would be used in systematic risk management. A total of 31% of participants state that they do not use any risk management methods, which suggests that there is no risk management in the consultancy. A total of 56% work with risk checklists, but only 15% and 16% use qualitative and quantitative risk analyses, respectively. A risk scoring model is used by fewer than 10% of participants.

The results show that although there are approaches to utilising methods, they do not allow any conclusions to be drawn about the quality with regard to the high use of checklists. In general, however, the low utilisation of systematic risk management is also confirmed here.

To confirm this, respondents were asked about established risk management tools that can be implemented as simple standards and would also allow digitalisation. The majority of respondents (55.75%) do not use any instruments or methods. Methods other than those listed were stated by 22.1%, although no in-depth statement can be made about these methods. It is interesting to note that almost 15% stated that they use SWOT analysis, which is not actually one of the methods that can be used in risk management. It applies more to analysing processes and potential weaknesses that would result in further measures. The risk matrix was cited by 13.3% of participants as a genuine instrument for risk identification and assessment. All other methods are used by far fewer than 10% or, like FTA, are not used at all. It must therefore be stated that only a few of the respondents had any real knowledge of systematic risk management. Instead, the results show that there is either no

application at all or incomplete knowledge, as the individual result of the SWOT analysis response also allows.

This is also noticeable in the methods used to identify risks, with >68% focussing on brainstorming. Such methods are generally preparatory measures for further actions that appear necessary. Scenario analyses are stated at around 22% and mind maps at 18.6%. They are regarded as extensions of brainstorming to refine planning activities and methods. Monte Carlo simulations, which are used with digital support, are only used by >6%. Methods other than those specified are used by >21%, but do not allow any specific statement to be made. This shows that the participants use methods whose quality in risk identification can be assessed differently. Nevertheless, the use of these methods seems to indicate an emerging risk awareness.

This becomes concrete when it comes to the question of standardised or individualised applications in risk management. At >32%, it is clear that one-third ultimately do not use systematic risk management and only selectively identify an emerging method as such, as the previous results make clear. A total of 25% use standardised procedures that they apply to each individual insolvency case. Individualised and thus redefined for each individual case is used by >30%. The inferential statistical analysis will show how this relates to the size of the consultancies, as it is assumed that large consultancies in particular are customised.

The following results were obtained when identifying generally occurring risk-based factors in counselling and the corresponding countermeasures.

Risks from client–advisor relationships are recognised by the majority (54%) to a relevant extent, which can be rated as average. An insignificant risk is recognised by 23% and to a high degree by 18.6%. The influence of the relationship between client and counsellor is therefore seen as moderate and given.

The necessary determination and transfer of relevant data and information is primarily ensured by the participants through questionnaires and checklists (>52%), which also corresponds to the answers in the risk checklists in the methods. Meetings and reports follow with approx. 41%. Educational talks and information brochures are used by >30% of participants, which are primarily provided during the initial contact with the client. No special measures are used by approx. 17%.

Dealing with risks by withholding and concealing important data and information is an essential risk factor for insolvency counselling. Nevertheless, >44% of participants emphasise the culture of trust and open exchange. No special measures are in second place with 29.2%. Indicators and warning signals were also cited by 23%, although it should be noted that experience and good knowledge of human nature are indicators that are not considered risk management tools. Compliance with any checks is used by 18.6%. Only 10.6% use systematic risk management tools to identify information gaps in the process that could result in a liability risk. This allows the interpretation that in the case of sensitive business partnerships between advisor and client in insolvency, the advisors often assume that the client will cooperate in the crisis. This also results in only a few measures being taken in systematic risk management.

This is also reflected in the results for measures to ensure cooperative behaviour in the insolvency process. A total of >44% use regular meetings and agreements to secure all relevant compliant measures, data and information from the client. A total of 35.4% see a clear definition of obligations and rights for both contractual partners in the contracts drawn up, which provide legal protection for the consultant. A total of >30% offer a flexible remuneration system that fairly assesses the services and thus incentivises cooperation. Due diligence as an analysis of the client's performance in the process is only used by 15%. The risk management measures of identification and evaluation are actually best combined here, but are only used to a limited extent, which indicates the usage behaviour of risk management in insolvency consultancies.

As a final assessment of risk management in their own consultancy, respondents were asked about future plans for implementation and utilisation. A total of 27.4% have never thought about it and a further 26.6% have thought about it but have not taken any action. A total of 24.8% of participants had already established risk management in 2020. Only >5% started after 2020. Even fewer (3.5%) are planning to introduce it.

The areas in which risk management would be necessary are located with >70% in the liability risks of consultants. This is followed by fee and liquidity protection with 54%, IT security (approx. 38%) and data protection (35.4%) and compliance risks with >29%. The awareness is therefore there, as was also stated at the beginning of the survey. However, the utilisation and methods do not support the majority of companies using systematic risk management.

4.3. Inferential Statistical Analysis of the Results

In order to verify the hypotheses of the study and to shed more light on the practice of risk management in insolvency consulting companies, an inferential statistical analysis is carried out in this section. Tables 3 and 4 also serve to increase scientific reliability.

Table 3. Hypothesis 2: chi-square goodness-of-fit test.

Question	Option	Answers	Ratio
Q. 4 In your opinion, how many of the insolvency advisors in Germany use risk management?	0–24%	77	68.14%
	25–49%	28	24.78%
	50–74%	7	6.19%
	75–100%	1	0.88%

Table 4. Hypothesis 2: chi-square goodness-of-fit test.

Statistic for Test:	
Question 4 (Q. 4):	In your opinion, how many of the insolvency advisors in Germany use risk management?
Chi-Square:	131.142
Df:	3
Asymptotic significance:	0.000
For 0 cells (0.0%), fewer than 5 frequencies are expected. The smallest expected cell frequency is 28.3.	

A correlation analysis is performed to test Hypothesis H1 (“The vast majority of respondents do not have an internal risk management system as a strategic option for their clients”).

Question 9, as shown in Table 5 below (Q. 9: “In which areas of your work do you use risk management?”), is correlated with questions 13 and 16–18 (see Table 5) using the Spearman correlation (Q. 13: Which of the following methods do you use to identify unknown risks and generate solutions?, Q. 16: How do you ensure in your advisory activities that you receive all relevant information from clients?, Q. 17: How do you deal with the risk that clients may (unconsciously or consciously) withhold potentially critical information?, Q. 18: How do you ensure that your clients act fairly towards you and support you in the advisory process in the best possible way?).

Table 5. Differences in the use of systematic risk management by insolvency counselling size.

Q. 9: In which areas of your work do you use risk management?	In no area	$F(2, 110) = 3988; p < 0.005$	Most selected in small law companies
	Identification of compliance risks	$F(2, 110) = 7170; p < 0.005$	Most selected in large law companies
	Data protection	$F(2, 110) = 3408; p < 0.005$	Most selected in large law companies
Q. 10: Which standards, internal regulations and quality seal requirements do you use as a guide for your consulting activities?	ISO 31000:2018 (ISO 2018)	$F(2, 110) = 4766; p < 0.005$	Most selected in large law companies
	ISO 9001:2015 (ISO 2015)	$F(2, 110) = 15,836; p < 0.005$	Most selected in large law companies
	ISO/IEC 27001:2013 (ISO 2013)	$F(2, 110) = 5401; p < 0.005$	Most selected in large law companies
	VID-CERT	$F(2, 110) = 5894; p < 0.005$	Most selected in large law companies
	InsO Excellence	$F(2, 110) = 5100; p < 0.005$	Most selected in large law companies
	None	$F(2, 110) = 4386; p < 0.005$	Most selected in individual law companies
	Other	$F(2, 110) = 2931; p < 0.005$	Most selected in large law companies
Q. 11: Which of the following specific risk management tools and methods do you use?	Quantitative risk analysis	$F(2, 110) = 3740; p < 0.005$	Most selected in large law companies
	Risk scoring models	$F(2, 110) = 3849; p < 0.005$	Most selected in large law companies
	None	$F(2, 110) = 5349; p < 0.005$	Most selected in small law companies
Q. 12: Which of the following methods of risk identification and assessment do you use?	Risk matrix	$F(2, 110) = 13,056; p < 0.005$	Most selected in large law companies
	FMEA	$F(2, 110) = 10,483; p < 0.005$	Most selected in large law companies
	None	$F(2, 110) = 7359; p < 0.005$	Most selected in small law companies
Q. 13: Which of the following methods do you use to identify unknown risks and generate solutions?	Mind mapping	$F(2, 110) = 5259; p < 0.005$	Most selected in large law companies
	Monte Carlo simulations	$F(2, 110) = 3322; p < 0.005$	Most selected in large law companies
	Other	$F(2, 110) = 3191; p < 0.005$	Most selected in large law companies
	None	$F(2, 110) = 3129; p < 0.005$	Most selected in small law companies
Q. 16: How do you ensure in your advisory work that you receive all relevant information from clients?	Clarification	$F(2, 110) = 6046; p < 0.005$	Most selected in individual law companies
	Communication and information guidelines	$F(2, 110) = 7307; p < 0.005$	Most selected in large law companies
	Questionnaire, checklist	$F(2, 110) = 4445; p < 0.005$	Most selected in large law companies
	Status meeting	$F(2, 110) = 6693; p < 0.005$	Most selected in large law companies

Table 5. Cont.

Q. 17: How do you deal with the risk that clients might (unconsciously or consciously) withhold potentially critical information?	Compliance check	$F(2, 110) = 9153; p < 0.005$	Most selected in large law companies
	Emergency plan	$F(2, 110) = 3393; p < 0.005$	Most selected in large law companies
	Other	$F(2, 110) = 6428; p < 0.005$	Most selected in large law companies
	None	$F(2, 110) = 7129; p < 0.005$	Most selected in small law companies
Q. 18: How do you ensure that your clients act fairly towards you and provide you with the best possible support in the advisory process?	Transparent remuneration system	$F(2, 110) = 3806; p < 0.005$	Most selected in large law companies
	Due diligence	$F(2, 110) = 23,770; p < 0.005$	Most selected in large law companies
	Adaptation of the counselling approach	$F(2, 110) = 3308; p < 0.005$	Most selected in individual law companies
	None	$F(2, 110) = 7256; p < 0.005$	Most selected in large law companies

In conclusion, it can be said that there are sufficient significant correlations between the questions, which means that Hypothesis H1 is confirmed as follows: the vast majority of insolvency counsellors have insufficient awareness of risks in their own work processes.

Question 4 was selected as the primary source for testing Hypothesis H2 (“The vast majority of insolvency consultancies are insufficiently aware of risks in their own work processes”). The descriptive analysis already showed that the majority of responses indicated that the majority of respondents do not yet use systematic strategic risk management.

This will now be tested statistically using a chi-square adjustment test: Question 4 (Q. 4): $\chi^2(df = 3) = 131,142, p < 0.05$ Significant.

This rejects the null hypothesis that all response categories are the same. The alternative hypothesis or the research hypothesis is accepted. There is a leading category for this question and this is that fewer than 25% of insolvency counsellors use risk management. Confirmation of this statement was also seen for questions 14 and 19 (for Q. 14 and 19, see Table 4) in the descriptive analysis.

Hypothesis H2 is therefore confirmed as follows: the significant majority of subjects (more than 75%) do not use systematic strategic risk management.

To analyse Hypothesis H3, the three groups of insolvency consultancies are compared with each other in terms of the number of consultants. The focus here is on the questions on the details of risk management, questions 9–13 and 16–18 (see Table 5). All of these questions are designed as a form of reconciliation. It is therefore possible to compare whether each answer category in the three groups differs in terms of the number of votes.

This is performed statistically with the help of variance analysis or ANOVA. It is not expected that each individual category will show significant differences. It is sufficient if some differences can be detected. Table 2 shows an extract of the results of the analysis of variance for all questions that revealed actual differences.

The results of the table show the F-test values and the corresponding significances. As these are below 0.05, the null hypothesis that the three defined cohorts do not differ is rejected. The analysis of the survey data reveals significant insights into the risk management behaviour of insolvency advisors. A detailed presentation of the results by company size shows that larger law companies tend to implement more systematic risk management approaches. This finding is underpinned by inferential statistical tests, which show a significant correlation between the size of the law firm and the degree of systematisation of risk management ($p < 0.05$).

The table shows the individual areas in which the three cohorts of insolvency counsellors differ. To summarise, it can be said that there are clear differences and that Hypothesis 3 is confirmed. There are significant differences in the use of risk management between the three cohorts: individual law companies, small and large law companies.

5. Discussion and Conclusions

5.1. Context and Necessity of Risk Management for Insolvency Advisors

Over the past eight years, various global and regional events such as Brexit, massive trade conflicts during President Trump's term in office, the COVID-19 pandemic, the war in Ukraine, conflicts in the Middle East and the Gulf region and the growing impact of climate change have increased the need for robust risk management in the economy. These events not only influence the general economic environment, but also have a direct impact on the financial stability of companies.

For insolvency advisors, who act both as legal advisors and as intermediaries between various stakeholders, a sound understanding and implementation of risk management strategies is of particular importance. Insolvency advisors are faced with the challenge of ensuring the economic stability of their clients while at the same time fulfilling regulatory requirements. Systematic strategic risk management is therefore essential in order to effectively protect the interests of clients and ensure compliance.

Studies have shown that crises and unexpected global events increase the vulnerability of companies to economic uncertainties. This emphasises the need for insolvency practitioners to have robust risk management practices in place to efficiently manage the economic and legal challenges. The implementation of such practices not only helps to prevent insolvencies, but also to optimise the restructuring process of affected companies.

However, the analysis of the survey conducted shows that comprehensive risk management is not yet widespread in insolvency consulting companies. Many advisors still rely on intuitive decisions and trust-based approaches rather than systematic risk management methods. This highlights the urgent need for the greater integration of risk management strategies into the practice of insolvency counselling.

5.2. Empirical Findings and Recommendations for Action

A key aspect of implementation is the creation and promotion of risk awareness, as the empirical findings suggest that many insolvency advisors lack awareness of a risk management culture, which makes risk management more difficult (Scherer et al. 2021). The survey results make it clear that many insolvency advisory processes are still strongly based on trust and intuition ("entrepreneurial gut feeling", Scherer and Fruth 2019; Scherer 2012) and not on systematic risk management methods.

Although risk management practices are already established to a certain extent in some areas, these mainly address peripheral aspects such as data protection, information security and quality management in accordance with ISO 9001. The central risk-based factors that affect the core of insolvency counselling are not sufficiently covered by these standards, which can lead to incomplete risk identification and assessment and significantly impair the effectiveness of the counselling process.

The implementation of specific standards such as the COSO ERM Framework and ISO 31000:2018 (Hunziker et al. 2020), which are directly aimed at strategic risk management for the operational business, is crucial in order to standardise risk analysis and reduce dependence on subjective assessments. In addition, improving risk communication can increase the flow of information and understanding of risks.

Comprehensive risk management should incorporate all relevant risks, not just specific aspects such as data protection or information security. The aim is to strengthen compliance and governance and increase resilience, which is particularly important in today's volatile economic climate (Scherer 2019). A solid risk management approach enables insolvency advisors to manage their clients' economic and legal challenges efficiently while optimising their own work processes.

5.3. Testing the Hypotheses

The results of the survey suggest that the implementation of specific risk management standards, such as the COSO ERM Framework and ISO 31000:2018, would significantly improve the quality and reliability of risk management practices. These standards aim to

embed strategic risk management into operations, increasing not only the professionalism but also the effectiveness of the entire insolvency advisory process.

Systematic risk management helps to view each insolvency procedure as an individual project and to develop customised solutions. Companies differ in their structures, cultures and management styles, which is why a standardised approach is often not sufficient. Personalised risk management that combines risk checklists and tools for risk identification and assessment is therefore essential. Digital structures can help to minimise the human factor as a source of uncertainty and ensure the completeness of the data collected. Simple Andon systems (traffic light systems) can be helpful to ensure that all required documents and information are fully provided by the client (Troßmann and Baumeister 2017).

These findings are essential to test the hypotheses of this study as they highlight the necessity and effectiveness of risk management practices in insolvency advisory companies. The survey results and the analysis of existing practices provide a sound basis for verifying specific hypotheses about risk management awareness and the implementation of strategic measures in this industry. Based on the clear findings, the following can be stated with regard to hypotheses H1, H2, H3:

H1: *The vast majority of insolvency counsellors are insufficiently aware of risks in their own work processes.*

H2: *The vast majority of respondents do not have an internal risk management system as a strategic option for dealing with clients.*

H3: *It is assumed that there are differences due to the size of the consulting companies with regard to risk management and implementation.*

The hypotheses put forward can be determined beyond doubt based on the clear and significant survey results and are considered confirmed after the inference analysis. The confirmation of the hypotheses shows that there is an urgent need for action to improve risk management in insolvency consulting companies, particularly in the form of risk awareness and strategic risk management.

5.4. Answering the Research Questions

Based on these well-founded results, the research questions posed in the research paper can be clearly answered. The survey carried out and the subsequent analysis provide clear data that enable a precise assessment of current risk management practices in insolvency consulting companies. The following research questions can therefore be answered precisely:

(a) *Is risk management necessary and useful in insolvency counselling?*

This research question can definitely be answered in the affirmative. The survey results and the analysis of existing risk management practices in other industries clearly show that systematic risk management systems have proven their worth and have led to numerous certifications for compliance. Insolvency consulting companies reap the same benefits by recognising risks early and implementing effective risk management strategies. This not only strengthens the stability of companies, but also increases the trust of clients and stakeholders.

(b) *What form does risk awareness take in insolvency counselling?*

The results of the survey have shown that there is still considerable room for improvement in risk awareness in insolvency counselling. Although some insolvency advisors already apply basic risk management practices, systematic risk management is not established in most cases. There is an overriding attitude of basic trust in clients and their own processes without carrying out a formal risk assessment. This realisation underlines

the need to raise awareness of risk management and provide appropriate training and development opportunities.

(c) *Is risk management used in insolvency counselling?*

Statistics have shown that the majority of individual law companies and small law companies in particular do not have a systematic risk management system. This represents a significant risk, as these law companies face the same challenges as larger consulting companies. The requirements for insolvency advice are independent of the size and resources of the consultancies, which can result in more liabilities and compliance violations that can deprive smaller consultancies of their essential basis. Systematic risk management could prevent such risks at all levels of the processes, which would significantly increase the long-term stability and effectiveness of insolvency counselling.

The clear and significant survey results make it clear that comprehensive and systematic risk management is not only necessary, but also extremely useful in order to effectively meet the current and future challenges in the industry. The empirical data underpin the necessity and benefits of sound risk management in insolvency consulting companies, which enables the research questions to be answered in a precise and well-founded manner.

5.5. Limitation of the Study

In order for readers to fully understand the framework and specific context of the research and to enable them to make an informed interpretation of the findings and recommendations, it is important to emphasise that the research is deliberately limited to the group of insolvency advisors and to the geographical area of Germany. This limitation allows the findings to be specific and relevant to the German context but excludes insolvency advisors and insolvency advisory companies outside the German legal framework.

In this context, the distinction between the groups of insolvency advisors and insolvency administrators is essential for understanding the different roles and responsibilities in insolvency counselling and administration. The focus on insolvency counsellors in the research work makes it possible to examine the specific challenges and requirements of this professional group in detail and to formulate practical recommendations.

The tasks of the insolvency administrator are clearly defined in the German Insolvency Code (InsO) as a procedural regulation. An insolvency administrator is appointed by a state court and is authorised by law to manage and dispose of the company's assets (Section 80 InsO). This means that the insolvency administrator has far-reaching powers to manage and wind up the insolvent company. It should also be noted that insolvency administrators are only liable in accordance with Sections 60 and 61 InsO, whereas insolvency consultants are exposed to more extensive liability risks.

In contrast, the insolvency consultant acts in an independent advisory capacity on behalf of the client on a contractual basis. The consultant has no rights of administration or disposal over the company's assets. Their work primarily involves advising and supporting the company in crisis, whereby they bear a considerable entrepreneurial risk of their own. This risk extends in particular to liability risks that may result from the consultancy service and is subject to the general statutory liability regulations. Within the scope of contractual liability in accordance with Section 280 (1) of the German Civil Code (BGB) in conjunction with the mandate agreement, the consultant can be held liable for breaches of contractual obligations. A further area of liability relates to the breach of ancillary contractual obligations, in particular the duty to inform and warn of possible obligations to file for insolvency, even if there is no explicit mandate to check whether the company is ready for insolvency. A particular risk of liability arises from aiding and abetting the delay in filing for insolvency if the consultant does not point out an imminent risk of insolvency in good time. In such cases, the consultant can be held criminally liable under the German Criminal Code (StGB) as a perpetrator or participant (instigator or accessory) in offences committed by the company management.

In summary, it should be emphasised that the clear distinction between the roles of insolvency advisors and insolvency administrators is essential in order to precisely

define their responsibilities and risks. The in-depth examination of liability risks and legal conditions will provide a solid foundation for future research, offering valuable insights and contributing to the further development of effective risk management strategies in insolvency counselling. The targeted focus on insolvency advisors enables a detailed analysis of the specific challenges faced by this professional group and the development of practical recommendations for action. The deliberate limitation to the German legal framework ensures that the findings are applicable to German insolvency advisors. Despite the limitation to Germany and German insolvency advisors, the findings are particularly meaningful as they concern the largest economy in the EU (Bömer and Weiß 2024) and are therefore of particular relevance for the entire European legal framework.

5.6. European Perspectives

Even if this study is regionally limited to Germany, important findings can be derived from it for the European context. The need for proactive risk management is further emphasised by the considerable differences between insolvency proceedings in the individual EU countries. These differences concern, among other things, the timing of the initiation of insolvency proceedings, the associated costs and the possible restructuring measures to keep a company afloat despite insolvency. Such differences lead to uncertainties and unpredictability for cross-border insolvency counselling companies, as they have to adapt to a variety of different insolvency regimes.

Coutinho et al. (2023) highlight these discrepancies and underline the need for the greater harmonisation of insolvency legislation within the EU in order to create a more uniform and predictable economic landscape. Given the highly advanced interconnectedness of companies at supra- and international level, a standardised procedure involving only one legal system to be observed would also mean an additional reduction in risk for insolvency advisors.

The need to harmonise the insolvency laws of individual countries at EU level has already been recognised. At the beginning of December 2022, the European Commission presented a draft directive on the harmonisation of insolvency law, which is intended to consistently drive forward efforts to create a uniform European legal area in insolvency law (European Parliament and European Council 2022). The current draft EU directive on the harmonisation of certain aspects of insolvency law (COM (2022) 702) aims to reduce the differences between national insolvency proceedings by setting uniform minimum standards (Hallak 2023).

The draft addresses important areas such as the efficiency of proceedings, the recovery of assets and the distribution of recovered assets among creditors. By standardising these processes, cross-border insolvency advisory companies will be able to work with a more consistent legal position, which will significantly simplify risk assessment and strategic risk management. These measures help to reduce legal uncertainties and enable advisors to support and advise their clients more effectively.

A harmonised insolvency procedure in Europe would increase legal certainty, improve the efficiency of cross-border insolvency proceedings and thus promote investment and strengthen confidence in the European market. The establishment of the draft harmonised insolvency framework within the EU is therefore ultimately an urgent necessity that could have far-reaching positive effects for the entire European economy and would ultimately even contribute to the stability of the entire economic area.

The harmonisation of insolvency law within the EU would also allow insolvency advisory companies to standardise their processes, leading to increased efficiency and better risk management. This is particularly important in times of economic uncertainty and global crises, where a stable and predictable legal environment is essential.

5.7. Summary and Outlook

This study has shown that sound risk management is of crucial importance in insolvency counselling. A key aspect of this is the creation of comprehensive risk awareness and

the implementation of systematic risk management practices. The application of standards such as COSO ERM and ISO 31000 is critical. Such measures are central to ensuring the long-term stability of these companies and contribute to consolidating macroeconomic stability.

A particularly forward-looking approach is the integration of modern technologies, in particular artificial intelligence (AI), in risk management. AI technologies have the potential to efficiently analyse large and complex amounts of data and enable a more precise identification and assessment of risks. This can significantly improve decision making and increase the ability to respond to financial crises. However, the introduction and further development of these technologies is tied to the availability and progress of hardware technology (Schürholz and Spitzner 2019). Despite the clear benefits of these technological advances, there is a reluctance in Germany to make the necessary investments in AI. In an international comparison, Germany is far behind leading technology nations such as the UK, the USA, Japan and France (Zimmermann 2022).

The integration of AI into risk management represents significant progress, but this can only be fully realised through targeted investment and the expansion of technical infrastructures. In this context, it is also important to consider the legal and ethical framework for the use of AI technologies in order to ensure their sustainable and responsible use. In addition, the development of standards and best practices for the use of AI in risk management could help to promote the acceptance and application of these technologies in insolvency counselling.

To summarise, insolvency advisors need to develop an awareness of risk management and implement strategic risk management practices, supported by advanced AI technologies. This integration significantly strengthens the resilience and competitiveness of insolvency advisory companies.

Further research should aim to implement the practical application of risk management tools in the practice of insolvency advisors and analyse their added value. To this end, research into the degree of digitalisation of insolvency advice could also be useful. This is particularly important as many risk management tools are available in digital form via software and could theoretically be easily integrated into the processes. However, as with risk awareness, it can be assumed that the use of digital tools is generally low among insolvency advisors. This could be determined through special research in the form of surveys.

Another perspective for future research could be to investigate the impact of AI integration on the efficiency and effectiveness of insolvency counselling processes. It would be interesting to analyse the extent to which AI technologies can help to improve decision making and increase the ability to respond to financial crises.

Overall, it is clear that the further development and implementation of risk management practices, supported by technological innovations, are of crucial importance for the future viability of insolvency consulting companies. Increased research in this area will help to strengthen the resilience and competitiveness of these companies in the long term. Insolvency advice that is aligned with international risk management standards not only strengthens the national economy, but also creates a stable and resilient economic environment for Europe as a whole by promoting confidence and security for cross-border business.

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Appendix A

The tabular data from the empirical research are presented below. The tables were created automatically using the Survio[®] tool.

What size do you classify your company as?

Single choice, answered 113x, not answered 0x

Option	Answers	Ratio
1 to 3 advisor	39	34.51%
4 to 10 advisor	41	36.28%
More than 10 advisor	33	29.2%

How high do you assess the possible benefits of specified risk management for insolvency advisors in general?

Single choice, answered 113x, not answered 0x

Option	Answers	Ratio
No benefit at all	1	0.88%
Low benefit	17	15.04%
High Benefit	70	61.95%
Benefit are neither low nor high	12	10.62%
Do not know/No information	13	11.5%

How do you assess the benefit of risk management to avoid liability for yourself?

Single choice, answered 113x, not answered 0x

Option	Answers	Ratio
No benefit at all	2	1.77%
Low benefit	18	15.93%
High Benefit	76	67.26%
Benefit are neither low nor high	10	8.85%
Do not know/No information	7	6.19%

In your opinion, how many of the insolvency advisors in Germany use risk management?

Single choice, answered 113x, not answered 0x

Option	Answers	Ratio
0 - 24%	77	68.14%
25 - 49%	28	24.78%
50 - 74%	7	6.19%
75 - 100%	1	0.88%

How have developments since the Corona pandemic (supply chains, inflation, war, terror) influenced the complexity of your consulting work and the risk of liability?

Single choice, answered 113x, not answered 0x

Option	Answers	Ratio
No influence	12	10.62%
Have lost weight	1	0.88%
Slightly increased	28	24.78%
Significantly increased	45	39.82%
Massively increased	23	20.35%
Do not know/No information	4	3.54%

What influence does the COVID-19-Act (COVInsAG) have on the risks and complexity of consulting work?*Single choice, answered 113x, not answered 0x*

Option	Answers	Ratio
No influence	10	8.85%
Have lost weight	7	6.19%
Slightly increased	38	33.63%
Significantly increased	28	24.78%
Massively increased	28	24.78%
Do not know/No information	2	1.77%

What influence do government Corona aid and measures (e.g., Bridging-Aid I-IV) have on the risks and complexity of consulting work?*Single choice, answered 113x, not answered 0x*

Option	Answers	Ratio
No influence	18	15.93%
Have lost weight	9	7.96%
Slightly increased	33	29.2%
Significantly increased	28	24.78%
Massively increased	24	21.24%
Do not know/No information	1	0.88%

In your opinion, how will the number of insolvencies change in the next three years?*Single choice, answered 113x, not answered 0x*

Option	Answers	Ratio
Will be the same/similar to 2023	6	5.31%
Will decrease	2	1.77%
Will slightly increase	41	36.28%
Will massively increase	63	55.75%
Do not know/No information	1	0.88%

In which parts of your work do you use risk management?*Multiple choice, answered 113x, not answered 0x*

Option	Answers	Ratio
Use no risk management	21	18.58%
Deadline management	67	59.29%
Contract drafting	31	27.43%
Analysis and assessment of liability risks when processing cases	29	25.66%
Assessment of risks in client advisor relationship	17	15.04%
Assessment of compliance risks (compliance of legal requirements)	46	40.71%
Data protection and information security	61	53.98%
Do not know/No information	5	4.42%

On which standards, internal regularizes, requirements of seals of quality do you oriented in your consultancy?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
ISO 31000:2018 (Risk management)	10	8.85%
ISO 9001:2015 (Quality management)	57	50.44%
MaRisk (Minimum requirements to risk management)	19	16.81%
ISO/IEC 27001:2013 (Information security)	21	18.58%
Technical und organizational measures for data protection (DSGVO/BDSG/TTDSG)	40	35.4%
Technical and organizational measures against money laundering (GWG)	34	30.09%
COSO ERM Framework (Enterprise Risk Management)	1	0.88%
ÖNORM D 4900 (Risk management)	4	3.54%
VID-CERT (Seal of proofed quality of insolvency consultancy of members of the VID)	35	30.97%
InsO Excellence (Seal of quality of the Gravenbrucher Circle e.V.)	12	10.62%
None of standards, requirements, seals of quality	24	21.24%
Others	10	8.85%
Do not know/No information	5	4.4%

Which of the following specific instruments and methods of risk management do you use?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
Risk workshops	8	7.08%
Risk checklists	64	56.64%
Qualitative risk analyze	17	15.04%
Quantitative risk analyze	18	15.93%
Risk scoring models	10	8.85%
Others	17	15.04%
None	35	30.97%
Do not know/No information	3	2.65%

Which of the following methods of risk identification and risk assessment do you use?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
SWOT-Analyze (Strength, Weaks, Opportunities, treats)	16	14.16%
Risk matrix	15	13.27%
FMEA (Failure Mode and Effects Analysis)	7	6.19%
Fault Tree Analyze (FTA)	0	0%
Bow-tie-Analyze	1	0.88%
Value at Risk (VaR)	4	3.54%
Ishikawa-Diagram (Cause Effect Diagram)	4	3.54%
Others	25	22.12%
None	63	55.75%
Do not know/No information	8	7.08%

Which of the following methods do you use to identify unknown risks and generate solutions?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
Brainstorming	77	68.14%
Scenario analyze	25	22.12%
Mind mapping	21	18.58%
Monte-Carlo-Simulation	7	6.19%
Others	24	21.24%
None	20	17.7%
Do not know/No information	5	4.42%

Do you use risk management in advertise standardized or individualized?

Single choice, answered 112x, not answered 1x

Option	Answers	Ratio
Do not use both	36	32.14%
Standardized	28	25%
Individualized	34	30.36%
Do not know/No information	14	12.5%

In your opinion, how can risks generate in the client advisor relationship?

Single choice, answered 113x, not answered 0x

Option	Answers	Ratio
Not at all	2	1.77%
Only insignificant	26	23.01%
To a relevant extent	61	53.98%
To a large extent	21	18.58%
Do not know/No information	3	2.65%

By which methods do you make sure in your consulting activity that you get all relevant information of clients?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
Information/leaflet on the importance of comprehensive information for successful consultation	34	30.09%
Communication and information standards	13	11.5%
Survey and checklists	59	52.21%
Status meetings for feedback for both sided coordination and briefings	46	40.71%
Others	16	14.16%
No specific measures	19	16.81%
Do not know/No information	3	2.65%

How do you manage the risk that clients that clients could unconsciously or consciously withhold potentially critical information?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
Risk management tools for Identification of information gaps	12	10.62%
Compliance-Checks	21	18.58%
Indicators and warn signals	26	23.01%
Emergency plan (plan B) for decision making when there is insufficient data	14	12.39%
Culture of trust and open exchange	50	44.25%
Others	15	13.27%
No specific measures	33	29.2%
Do not know/No information	3	2.65%

How do you make sure that all of your clients behave fair towards you and support you the best way in advisory processes?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
Transparent compensation system	34	30.09%
Clear contractual conditions regarding goals, services and mutual obligations	40	35.4%
Due Diligence of clients/Clients analyze	17	15.04%
Regular reporting and meetings	50	44.25%
Adaptation of the consulting approach	10	8.85%
Others	13	11.5%
No specific measures	31	27.43%
Do not know/No information	5	4.42%

Do you have think about an implementation of risk management since the begin of COVID-19 pandemic?

Single choice, answered 113x, not answered 0x

Option	Answers	Ratio
We had one before	28	24.78%
Implemented since pandemic	6	5.31%
Implementation planned	4	3.54%
Implementation discarded/rejected	3	2.65%
Never thought about it	31	27.43%
Sometimes thought about it but did not pursue it	30	26.55%
Frequently thought about it but undecided	5	4.42%
Do not know/No information	6	5.31%

In which parts of your work do you recognize the highest requirement for risk management?

Multiple choice, answered 113x, not answered 0x

Option	Answers	Ratio
Management of compliance risks	33	29.2%
Fee and liquidity protection	61	53.98%
Management of operative risks	32	28.32%
Market changes	8	7.08%
IT security	43	38.05%
Data protection	40	35.4%
Client advisor relationship	17	15.04%
Liability risks	80	70.8%
Reputation risks	30	26.55%
Others	1	0.88%
In none sector	4	3.54%
Do not know/No information	10	8.85%

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