



Arbeitskreis Quantitative Steuerlehre
Quantitative Research in Taxation – Discussion Papers

Kim Alina Schulz, Caren Sureth-Sloane

Tax Compliance Management Systems in German Tax Audits - An Analysis of Practical Experiences

arqus Discussion Paper No. 323
July 2025

Tax Compliance Management Systems in German Tax Audits - An Analysis of Practical Experiences

Kim Alina Schulz*

Paderborn University

Caren Sureth-Sloane†

Paderborn University

WU Vienna University of Economics and Business

August 2025

The German version of the paper has been published as follows:

Schulz, K. A., & Sureth-Sloane, C. (2024). Tax Compliance Management Systeme in deutschen Betriebsprüfungen – Eine Analyse praktischer Erfahrungen. *Steuer und Wirtschaft*, 101(4), 335–353.

Abstract: Recent regulatory changes and the adoption of the ‘DAC 7’ EU Directive have significantly increased the importance of Tax compliance management systems (Tax CMS) in German tax audits. Our interview-based study, which draws on the insights of experts from various sectors, including industry and commerce on the one hand side and tax advisors on the other hand side, reveals nuanced perspectives on the impact of Tax CMS on tax audits. Our results reveal that the number of Tax CMS in German firms has increased in recent years and that, in particular, the majority of large firms have implemented these control systems. From a firm’s perspective, there has been no discernible impact on the duration, scope, or focus of tax audits, nor the frequency of tax disputes or the number and size of tax refunds. However, tax practitioners in advisory firms report a slight positive change in the audit environment, with fewer tax disputes, and a more efficiency-driven approach to audit procedures, with an increase in process-oriented audits. These findings represent preliminary observations on the use and effectiveness of Tax CMS in tax audits. They provide early insights into the advantages and disadvantages of these systems. These findings are particularly relevant given the expected increasing role of Tax CMS in German tax audits, driven by ongoing regulatory developments.

Keywords: tax compliance; compliance management systems; tax audits; Tax CMS, tax technology

JEL Classifications: H21; H26; H32; H83

Acknowledgements: The authors would like to thank the tax advisors and firm employees interviewed for their participation in our interview study. Our special thanks go to the anonymous reviewer and the editors for their valuable comments on our article. We would also like to thank Vanessa Heinemann-Heile and Rainer Niemann as well as the participants of the arqus Annual Conference 2023 for helpful comments on an earlier version of this article. The authors are grateful for the funding of this work by the German Research Foundation (DFG) as part of the Collaborative Research Centre (SFB/TRR) project number 403041268 - TRR 266 Accounting for Transparency.

* *Kim Alina Schulz* is a research assistant at the Chair of Business Administration, in particular Business Taxation at Paderborn University.

† Prof. Dr Dr h.c. Dr h.c. *Caren Sureth-Sloane* is Professor of Business Administration, in particular Business Taxation, at the University of Paderborn and a visiting professor at the Vienna University of Economics and Business.

I. INTRODUCTION

Tax compliance management systems (Tax CMS) are designed to help firms ensure the correctness and completeness of their tax returns (OECD, 2013). They are also becoming an increasingly relevant factor in German tax audits. The importance of Tax CMS has increased enormously since the implementation of the "DAC 7" EU Directive 2021/514 ("DAC 7" Directive) on 1 January 2023, as it allows Tax CMS to be explicitly included in tax audits. Firms that implement a Tax CMS may be granted audit relief. This means that Tax CMS forms part of a cooperative tax compliance strategy through which firms can voluntarily demonstrate transparency towards the tax authorities. In return for this transparency, firms may be granted personal indemnification, audit relief, fewer tax disputes, and shorter tax audit durations (Eßer et al., 2020; Haubner, 2021; Ludwig et al., 2021).

Even before the "DAC 7" Implementation Act came into force in 2023, Tax CMS in Germany were subject to increasing regulation. Following the extension of Section 153 AO in 2016 firms accused of tax evasion could use the existence of an effective tax CMS as evidence against intentional or reckless behavior, thereby absolving themselves of liability (Bundesministerium der Finanzen, 2016; IDW, 2021). The results of our interview study indicate that this decree has contributed to the ongoing increase in the number of Tax CMS implementations in Germany in recent years. This study examines the extent to which the increasing importance of Tax CMS for firms has led to changes in the German tax audit process.

Tax CMS help to ensure tax compliance¹ and, in particular, avoid tax compliance risks, such as back tax payments or penalties (IDW, 2017; Blaufus & Trenn, 2018). Internationally, some countries are already incorporating these systems comprehensively into tax audits. These

¹ In this article, tax compliance is defined as a firm's obligation to comply with all applicable tax laws and tax regulations, which includes the possibility of minimizing taxes within the framework of the statutory provisions (Risse, 2017). In this paper, tax non-compliance always refers to the intentional violation of applicable tax law (Slemrod, 2007).

countries have developed the classic historical audit approach into a timely tax audit (Greil & Kiesow, 2014; De Widt & Oats, 2017). The resulting approaches, such as horizontal monitoring, can reduce firms' compliance costs and increase their perceived tax certainty (Eberhartinger & Zieser, 2021). However, it is unclear whether the increasing use of Tax CMS in tax audits in Germany will have a similar effect. Despite increasing regulation and the inclusion of Tax CMS in tax audits, there is still a lack of knowledge regarding the extent to which these systems impact the tax audit process.

One exception is the survey study by Blaufus et al. (2023), which finds evidence of a positive correlation between tax audit aggressiveness and an improvement in Tax CMS quality. Blaufus et al. (2023) explain this correlation based on the costs of compliance violations resulting from increasing tax audit aggressiveness. Firms are attempting to reduce the number of these errors and the associated costs by improving the quality of Tax CMS in the future. In addition, some survey and game theory studies analyze selected aspects of Tax CMS without considering the connection with tax audits. For example, Blaufus and Trenn (2018) analyze the prevalence and maturity of Tax CMS in German firms based on a survey of medium-sized firms, Eberhartinger and Zieser (2021) survey firms around the piloted horizontal monitoring in Austria and find that Tax CMS reduce tax risks and compliance costs, and Dyck et al. (2025) use a game theory model to investigate the extent to which the probability of tax disputes changes as a result of an improvement in the risk management system. Cooperative compliance programs, such as horizontal monitoring, actively involve Tax CMS in tax audits and can therefore lead to more timely audits (Greil & Kiesow, 2014; Eberhartinger & Zieser, 2021; Arbeitskreis Verrechnungspreise der Schmalenbach-Gesellschaft, 2022). Regarding tax risk management, Wunder (2009), for example, shows in a survey study with CFOs that the greatest tax risks are identified in corporate transactions and transfer pricing issues. In a case study, Plesner Rossing (2013) finds that the design of the control system depends heavily on the tax

environment. In his empirical analysis based on survey data, Trenn (2021) shows that the tax compliance reporting of German firms is not systematic and that high tax risk has a negative impact on the scope of reporting. Sulik-Górecka (2022) evaluates literature, laws, and compliance standards and concludes that a comprehensively implemented CMS supports the fulfillment of tax obligations and the conclusion of cooperation agreements with tax authorities. Studies of the effects of tax audits on firms are, for example, Dubin and Wilde (1988), who empirically document a deterrent effect of tax audits on tax non-compliance using archive data from the US Internal Revenue Service, Mendoza et al. (2017), who, using OECD and other data, find that an increase in the audit level above a certain threshold reduces tax compliance. Beer et al. (2020) show through a meta-analysis that firms which are audited despite being tax-compliant will pay less tax in the future.

In this study, we therefore investigate the effects of Tax CMS on the German tax audit process. In doing so, we expand the literature on the consequences of Tax CMS and tax audits, linking the two areas of research. Our study contributes to existing literature and is also of practical relevance for firms, tax consulting firms, and the tax authorities, as we provide valuable insights into the strengths and weaknesses of the current consideration of Tax CMS, which could help to improve its use in tax audits. As part of an interview study, we draw on experiences relating to the voluntary use of a Tax CMS. Firstly, we analyze the prevalence of Tax CMS in German firms and the proportion of those that have had their Tax CMS certified. We also document the reasons for implementing such a system, building on the findings of Blaufus and Trenn (2018). Next, we analyze the impact of Tax CMS on the relationship of trust between firms and the tax authorities, affecting the duration and scope of audits, back tax payments, and the number of tax disputes. Interviews with representatives from industry and commerce, as well as tax advisors, allow us to consider different viewpoints. Based on these findings, we further analyze the extent to which audits focus on high-risk business areas in

connection with increasing corporate transparency.²

Due to Germany's historical approach to tax audits and the increasing number of Tax CMS implementations since 2016, there is currently no data available on the inclusion of these systems in tax audits. As this type of data, which may contain information on tax audit strategies, is not generally publicly available, we conducted a study involving semi-structured guided interviews (Helfferrich, 2011). This approach allows us to analyze the current personal experiences of the experts interviewed. Between December 2022 and September 2023, we conducted 14 interviews with tax advisors from the German Big Four and Next Ten auditing firms,³ and seven interviews with senior management employees from the tax departments of German firms. We then analyzed these interviews qualitatively.⁴

The results of the analysis demonstrate the growing importance of Tax CMS for firms. All of the firms surveyed use a Tax CMS. Tax advisors estimate that, on average, 56% of their clients have implemented such a system. In terms of its impact on tax audits, tax advisors believe that Tax CMS have so far primarily led to an improved tax audit climate and therefore to fewer tax disputes. In addition, tax advisors recognize a shift in the focus of tax audits towards process audits, which they view as a positive step towards efficient, resource-saving audits. Conversely, firms emphasize that they are not currently aware of any such changes, expecting improvements only in future tax audit periods. Tax advisors also expect Tax CMS to play a greater role in tax audits in the future, accompanied by a cultural shift towards audit strategies that are less document-focused.

As many German firms are currently still being audited for periods preceding the

² The interview study is an extension of Kim Alina Schulz's unpublished master thesis from 2023.

³ In terms of turnover, the Big Four firms are the four largest tax consulting and auditing firms in Germany. Together with the Big Four, the next six largest of these firms form the Next Ten firms (Staufenbiel Institut, 2019).

⁴ Cf. on qualitative content analysis Mayring (1994, 2016, 2022).

that greater trust in tax authorities can reduce tax evasion, strengthen voluntary tax compliance, and enhance the perception of fairness (Mir Djawadi & Fahr, 2013; Mendoza et al., 2017; Fochmann et al., 2023). One way to foster trust and cooperation between tax authorities and firms is to implement internal tax control systems, such as corporate Tax CMS, also known as the Tax Control Framework (TCF)⁶. As there is no obligation to implement a Tax CMS in Germany, doing so is an act of voluntary tax compliance (Raatz, 2022).

Firms implement Tax CMS in particular to reduce tax compliance risks in the form of back tax payments, criminal sanctions, and reputational costs (Blaufus & Trenn, 2018). The implementation of an effective Tax CMS increases transparency between the tax authorities and firms, reduces information asymmetries, and thus could minimize tax risks on both sides (OECD, 2016). Tax CMS therefore have a compliance function as well as an information function within the firm and towards the tax authorities. They can also be part of a more comprehensive cooperative compliance (Kirsch, 2020).

In Germany, the structure of an appropriate Tax CMS is based on the guidelines of IDW Practice Note 1/2016, which was developed on the basis of IDW PS 980 and according to which the system should comprise eight basic compliance elements (IDW, 2017, 2021). On the system side, all Tax CMS have comparable components (Pull, 2022). However, the specific design depends on firm-specific factors, such as size, industry, and legal form (IDW, 2017). A risk-control matrix is often at the center of the Tax CMS, where the firm's tax compliance risks are compared with the measures and controls implemented to address those risks (IDW, 2017; Eßer et al., 2020; Arbeitskreis Verrechnungspreise der Schmalenbach-Gesellschaft, 2022).

The aforementioned framework conditions offer some room for maneuver in the design of the Tax CMS, although this is accompanied by legal uncertainties for firms (Weichel, 2020).

⁶ The Organization for Economic Co-operation and Development (OECD) uses the term TCF as equivalent to the term Tax CMS.

For example, 62% of the firms surveyed in a study estimate the maturity level of their Tax CMS at a maximum of 50% (Blaufus & Trenn, 2018). The Tax CMS Index, developed by Blaufus and Trenn (2018), also shows that, on average, SMEs only fulfill 32% of the requirements of the Institute of Public Auditors in Germany (IDW) for a Tax CMS and have therefore not implemented a sufficiently effective system. These studies indicate potential for improvement in the implemented Tax CMS.

In addition to implementation, the legislator offers the option of certification of the Tax CMS. Since 2011, German firms have been able to commission a voluntary audit and certification of *appropriateness*, as well as a subsequent audit and certification of *effectiveness* from an independent auditor (IDW, 2017, 2021; Rödl & Partner, 2023). The audit and certification as an effective CMS can serve as proof of compliance with the organizational and due diligence obligations of the Management Board and Supervisory Board (IDW, 2017).

In addition to the aforementioned regulations for certification and required components of Tax CMS, these systems have been subject to increasing regulation in Germany for several years. For example, in 2016, the Federal Ministry of Finance (BMF) granted the possibility in the Application Decree to the Fiscal Code (AEAO) that firms accused of tax evasion as a result of a tax audit can use the existence of an effective Tax CMS as evidence against this accusation (Bundesministerium der Finanzen, 2016; Haubner, 2021). This evidence then speaks against intentional or reckless behavior, reduces or avoids possible fines, and thus creates more legal certainty for firms (Bundesministerium der Finanzen, 2016; IDW, 2021). This regulation created an entrepreneurial incentive to implement such a system. In turn, we observe a wave of Tax CMS implementation in Germany in the years following 2016.

The degree to which Tax CMS become an integral part of tax audits increases with the implementation of the "DAC 7" directive on 1 January 2023, supporting firms' desire for more legal certainty and fewer tax disputes as a result of the audit. Art. 5 of the "DAC 7"

Implementation Act contains Section 38 EGAO, which provides for explicit consideration of Tax CMS in tax audits. If the Tax CMS is confirmed as being effective upon application during the ongoing tax audit, the tax authority can grant the taxpayer binding audit relief for the upcoming tax audit (Section 38 (1) EGAO). Certification of the system is not required (Kowallik, 2022b). The regulation initially includes a trial of new audit methods, which, nevertheless, creates a legal framework for future communication between the tax authorities and firms. The legal framework for Tax CMS in Germany therefore includes the guidelines for establishing an effective Tax CMS in IDW Practice Note 1/2016, the exculpation options in Section 153 AO, and the active application for audit simplifications via Section 38 (1) EGAO. However, the provisions for an effective Tax CMS need to be further clarified within the aforementioned legal framework (Hölzemann et al., 2023). A clarification of the legal requirements could support firms in improving their systems and lead to more legal certainty in the event of allegations of tax evasion (Schmeer, 2023).

As a component of cooperative compliance and due to the transparent exchange between tax authorities and firms, Tax CMS can be a driver in the development of digital and timely tax audits (Kirsch, 2020). In practice, the existence of a Tax CMS has been increasingly queried in German tax audits since 2018, and the scope and degree of maturity since 2021 (Kowallik, 2022a). In addition, as part of a pilot project launched in 2022 with two firms by the Bavarian State Ministry of Finance and Home Affairs, Tax CMS are being included more extensively in tax audits (StMFH, 2022). The results of this pilot project are used to further develop existing audit methods, as it is expected that Tax CMS will enable audits to be focused more specifically, thereby shortening the duration of tax audits (Kowallik, 2022a; StMFH, 2022).

Consistently, studies on international tax audit systems show that Tax CMS can

facilitate the further development of tax audit processes towards a timely tax audit.⁷

Tax audits

In Germany, tax audits primarily aim to assess and collect taxes in accordance with statutory regulations (Bundesministerium der Finanzen, 2022). In addition to clarifying unclear cases, tax audits establish whether taxpayers are complying with all tax regulations. If infringements are discovered, tax audits result in back payments being imposed, and penalties being issued if applicable, ultimately enabling the jurisdiction to encourage taxpayers to comply with tax regulations through controls (Buck & Klopfer, 2011; Fettke, 2019). Tax audits also have a corrective effect in that submitted tax returns can be amended (OECD, 2004).⁸ Furthermore, tax audits have a preventive effect, deterring tax evasion and encouraging taxpayers to voluntarily ensure tax compliance (OECD, 2004).

An interview study from Austria also shows that tax authorities can exert influence on firms through tax audits by offering rewards. These rewards are usually granted to cooperative, tax-compliant taxpayers and can be monetary, such as reduced tax payments, or of a non-monetary, such as positive feedback and public praise. The recipients of these rewards are not predetermined, meaning that tax audits can be described as a "bazaar" where positive or negative effects are negotiated (Gangl et al., 2019).

As a cooperative approach has not yet been institutionalized in Germany, and the extent to which information is disclosed during tax audits depends on factors such as the size of the

⁷ To this end, some countries are expanding the mere enquiry into the existence of Tax CMS to include a more comprehensive cooperative compliance strategy, which is based on firms working in partnership with the tax authorities and in which firms behave completely tax transparent in exchange for guarantees from the tax authorities (OECD, 2013; Greil & Kiesow, 2014; Eberhartinger & Zieser, 2021; Arbeitskreis Verrechnungspreise der Schmalenbach-Gesellschaft, 2022). The UK and the Netherlands are pioneers of this system, albeit with different structures. In the UK, large firms are obliged to work cooperatively with the tax authorities (De Widt & Oats, 2017). The Netherlands uses horizontal monitoring, in which firms can participate voluntarily if they have implemented a TCF. Horizontal monitoring extends the audit of only past-related data - as in German tax audits - to include continuous cooperation (Greil & Kiesow, 2014).

⁸ Such corrections led to a total of 13.1 billion euros in additional revenue from German tax audits in 2021 (Bundesministerium der Finanzen, 2022).

firm, the perceived information asymmetries generally lead to a lack of mutual trust between the two parties. Describing the audit process as a "bazaar" in our interviews suggests that improving the audit climate and building trust could be beneficial. However, it should be emphasized that tax audits can also take place in a trusting environment, and that the perceptions cannot be generalized to all firms. Another challenge to cooperation is that tax audits often cover tax periods of several years in the past. The long time lag between the case and the audit increases the firms' workload, as the case in question was processed by employees who are potentially no longer with the firm. This means that historical knowledge is lacking (Seer, 2009). For this reason, prompt tax audits have been introduced since 2011 (Section 4a BpO), in which fewer tax periods closer to the present are audited. However, the decision to conduct this type of audit is made by the tax authority. Accordingly, firms characterized by a high level of cooperation and tax compliance in previous audits are to receive corresponding relief (Seer, 2009). Nevertheless, a study by the Federation of German Industries (Bundesverband der Deutschen Industrie e.V.) shows that prompt tax audits have rarely been implemented and that the duration of tax audits has not decreased (Wünnemann, et al., 2019).

III. INTERVIEW STUDY

Main research questions

Firms implement Tax CMS for various reasons, depending on whether they are defensive or offensive taxpayers. Offensive firms engage in aggressive tax planning, aimed at minimizing tax payments, which can lead to violations of tax law or even fraud. Such firms may view Tax CMS as a means to further enhance their aggressive tax planning. However, Blaufus and Trenn (2018) show that the majority of medium-sized German firms surveyed have implemented Tax CMS to ensure tax compliance and tend to behave defensively. Furthermore, firms are increasing their investments in Tax CMS to comply with tax regulations, despite the increasing aggressiveness of tax audits (Blaufus et al., 2023). Nevertheless, Blaufus and Trenn (2018) find

that minimizing the tax burden while complying with all applicable laws is a high priority for half of the firms.

In addition, the aim of Tax CMS is to prevent penalties and back tax payments wherever possible, while reducing liability risks for management, the Executive Board, employees, and the firm itself. These are key incentives for introducing the system (Eßer et al., 2020; Haubner, 2021). Furthermore, implementation is motivated by the hope of shorter audit durations, reduced potential for conflict with tax authorities, and earlier legal certainty (Ludwig et al., 2021). Dyck et al. (2025) also show, using their game-theoretical approach, that improving the tax risk management system reduces the probability of legal disputes for firms even without additional dispute resolution expertise. These anticipated positive effects could explain why, in a 2020 survey of German firms, 64% were already implementing Tax CMS projects, and 17% planned to implement such projects in their domestic locations within one to two years (Eßer et al., 2020).

The international literature also confirms the tax relevance of internal control systems, emphasizing that the quality of these systems is crucial for effectively mitigating tax risks (Gallemore & Labro, 2015; Bauer, 2016; Brühne & Schanz, 2022). In addition to mitigating tax risks, Tax CMS are effective in reducing information asymmetries (Eberhartinger & Zieser, 2021). Reduced information asymmetries, in turn, can improve the trust relationship between tax authorities and taxpayers, influencing voluntary tax compliance (e.g., Kirchler et al., 2008; Batrancea et al., 2019; Mardhiah et al., 2019).

These studies support our expectation that Tax CMS positively impact the relationship of trust between firms and tax authorities, thereby positively affecting *audit duration*, *audit scope*, *back tax payments*, and the *number of tax disputes*. In this context, the relationship of trust is operationalized by a change in the aforementioned four parameters, which can be attributed to Tax CMS. A positive change in these parameters is therefore interpreted as an

indication of improved trust. To investigate how Tax CMS affect these areas, we first analyze four correlations qualitatively. Firstly, based on the respondents' assessments, we analyze whether Tax CMS shorten the duration of tax audits. Secondly, we analyze whether Tax CMS reduce the scope of tax audits. Thirdly, we analyze whether Tax CMS reduce the number of tax disputes resulting from a tax audit. Fourthly, we analyze whether Tax CMS reduce the amount of back tax payments resulting from a tax audit.

The basis for these correlations is the transparent disclosure of the Tax CMS, and therefore also of the risks mapped in the risk-control matrix by the firms and communicated to the tax auditors. Following its pilot project, the Bavarian State Ministry, for example, expects this transparency to enable more targeted tax audits and thus shorten their duration by involving the Tax CMS (Kowallik, 2022a; StMFH, 2022). To achieve these efficiency gains, tax auditors could utilize corporate transparency and shift the focus on high-risk areas of the firm. However, such a change could have a negative impact on firms, for example in terms of the amount of back tax payments or the number of tax disputes. In this study, we analyze the experiences and assessments of respondents regarding whether Tax CMS will change the focus of tax audits.

Preparing a tax return that complies with legal requirements takes time and resources, which incurs costs for the taxpayer in the form compliance costs (van der Geest & Jacob, 2023).⁹ According to Slemrod (1989), these costs arise from determining and documenting taxable income, and from tax accounting. These expenses can be categorized as tax compliance costs, which result from the complexity of the tax system. Taxpayers also incur costs when trying to reduce their taxable income through tax planning within the framework of statutory provisions (Slemrod, 1989). Additional compliance costs result from the greater complexity of

⁹ For a literature review of empirical research findings on tax compliance costs, see Eichfelder and Vaillancourt (2014). See also Fochmann et al. (2023), who find in their survey that verification and documentation obligations and the preparation of tax returns in German firms are the two factors that contribute most to tax administration costs.

the tax system and the increasing number of compliance regulations (Mills, 1996; Schenkel, 2016; Hoppe et al., 2021, 2023). The size of the firm can also be a decisive factor in determining the level of compliance costs. According to a U. S. study, small and medium-sized firms have comparatively higher compliance costs than large firms (Slemrod & Venkatesh, 2002). Relative to firm size, compliance costs decrease as firms grow (Eichfelder & Hechtner, 2018). However, compliance costs continue to increase for firms that operate internationally (Blumenthal & Slemrod, 1995) because they must comply with the tax regulations of several countries, which increases complexity (Eichfelder & Vaillancourt, 2014). Compliance costs also arise from tax audits because taxpayers must provide auditors with information and evidence that their tax returns are correct, which takes time and uses up human resources (Mills, 1996). Experience from German tax audits shows that, despite the possibility of timely tax audits, the duration of audits and the average number of years audited have not decreased significantly since 2010 (Wagner, 2022). Therefore, the compliance costs for German firms during tax audits have remained high for years. A study of Austria shows that horizontal monitoring, which is based on Tax CMS, significantly reduces firms' compliance costs (Eberhartinger & Zieser, 2021). Reduced compliance costs can positively impact firms' investments, demonstrating their economic relevance not only to firms but also to the economy. Therefore, legislators are interested in this cost reduction as well (van der Geest & Jacob, 2023). Against this background, we analyze whether implementing a Tax CMS reduces firms' future compliance costs.

There are various reasons why the expected correlations may not occur. For example, it is conceivable that the desired improved relationship of trust may not materialize because of Tax CMS, which could prevent the desired simplifications and cost savings from being achieved.

Methodology

The lack of data for measuring the effect of Tax CMS on the process of tax audits makes it necessary to collect this data ourselves.¹⁰ Interviewing experts offers the opportunity to gather and analyze existing knowledge about this effect (Meuser & Nagel, 2002). For this reason, we conducted an interview study. We interviewed German tax advisors because they work with firms of various sectors, legal forms, and sizes and also they negotiate with tax auditors as part of their advisory services (Meuser & Nagel, 2002). However, when interpreting these responses, the self-interest of tax advisors must be taken into account. This is because tax advisors have a commercial interest in advising on and implementing Tax CMS. Therefore, it is possible that their answers are influenced by self-interest bias, making the consequences of Tax CMS appear particularly positive (Darke & Chaiken, 2005). For this reason, we also surveyed employees from tax departments of German firms as an additional group of experts. However, a certain self-interest bias cannot be ruled out in this group either, albeit to a lesser extent. This could be reflected in firms presenting the costs and consequences of Tax CMS in a particularly negative light. For example, it is possible that they overemphasize the remaining risks after implementing a Tax CMS to signal the need for the further regulatory development of the provisions and the use of Tax CMS in tax audits, and to obtain increasing relief in this regard. To analyze different perspectives, our sample includes respondents from both expert groups.

We conducted semi-structured guided interviews with open-ended questions to enable experts to describe their important experiences in detail and allow the interviewer to ask flexible questions. The guidelines for these interviews were developed based on the Tax CMS and tax audit literature described above. First, we created the guidelines for the interviews with tax

¹⁰ An evaluation of the ethical aspects of the interview study was requested from the ethics committee of Paderborn University. The research project was categorized as ethically unobjectionable by the committee.

advisors using the "SPSS" principle described by Helfferich (2011): collect, check, sort, and subsume. Then, the formulations were adapted for the firm interviews. First, we collected relevant questions to address the research question. Then, we checked whether these questions could be answered with open-ended responses. Finally, we sorted the questions by content, and summarized the follow-up questions. The result of this procedure is a set of guidelines consisting of four question blocks and 14 questions in total (see Appendix I).¹¹ Additionally, we collected personal, client, and firm-related descriptive data on the interviewees via a preliminary questionnaire (see Appendix I).

A total of 22 tax advisors and 12 firms were contacted via email. 14 tax advisors and seven firms agreed to be interviewed.¹² These results yielded positive response rates of approximately 64% and 58%, respectively. The interviews, which lasted on average 30 minutes and 52 seconds (SD = 11 minutes and 51 seconds), were conducted almost exclusively virtually between December 2022 and September 2023. In five interviews, the interviewees invited other Tax CMS experts from their department, leading to a total of 27 participants. In these cases, the interviewees are labeled with an additional letter in the evaluation of the preliminary questionnaires and the interview transcripts. After agreeing to participate, the participants received an email containing information about the contents¹³ of Section 153 AO and the "DAC 7" Implementation Act, as well as the preliminary questionnaire and a data protection declaration. The email informed them that, with their consent, the interview would be recorded, transcribed, and anonymized. Participants were explicitly informed about the recording at the beginning of the interview and had the opportunity to object at that time. After the interviews,

¹¹ This was additionally corrected by other researchers at Paderborn University and checked for relevance and suitability for the underlying study.

¹² No further interviewees will be acquired, as a saturation effect will set in after these interviews have been conducted and no new findings are expected from further interviews.

¹³ This content was also explained during the interviews.

aspects of the interview atmosphere, the interview process, and notable topics were recorded in accordance with Kaiser (2021).

The interviewees are almost exclusively managers or higher-level professionals (Table 1, Panel A). 48% of the interviewees have between 20 and 29 years of professional tax experience (Table 1, Panel B). Additionally, 78% rated their experience with tax audits on a Likert scale¹⁴ with a value between 7 and 10, indicating above-average experience. Further descriptive results (Table 5 in Appendix II) show that half of the respondents work in (corporate) tax departments. 18% state that Tax CMS is one of their core areas of work. A further 11% work in tax process consulting and 7% work in tax technology. Together, these areas account for around 36% of the respondents, demonstrating the expertise in the digitalization of the tax function and, therefore, in Tax CMS.¹⁵

Table 1: Background information on the interviewees from the preliminary questionnaire

Panel A: Characteristics of the interview group	Male	Female	N
Firms	5	4	9
Senior Vice President	1	-	1
Vice President	-	1	1
Manager	2	-	2
Head of	2	2	4
Tax consultant	-	1	1
Tax Advisors	14	4	18
Partner	9	1	10
Director	1	1	2
Senior Manager	3	-	3
Manager	-	2	2
Senior Associate	1	-	1
N	19	8	27

¹⁴ The Likert scale has a value range from 1 (= inexperienced) to 10 (= very experienced).

¹⁵ Further descriptive sample information can be found in **Error! Reference source not found.** Appendix II.

Panel B: Background information interview partners	N = 27	%
Work experience in years		
0 to 9	3	11%
10 to 19	8	30%
20 to 29	13	48%
30 to 39	3	11%
Tax audit experience (Likert scale from 1 to 10)		
0 to 3	2	7%
4 to 6	4	15%
7 to 10	21	78%
Professional experience at the tax authority		
Yes	3	11%
No	24	89%

Note: Panel A of the table shows the position in which the surveyed tax advisors and employees of the firms work, considering their gender. As the department name for the "Head of" position varies in our sample, all employees who hold a leadership position in the tax area are clustered under "Head of". Panel B documents the professional and tax audit experience for the entire sample. A total of 21 interviews were conducted. As the interviewees consulted additional experts in five interviews, the total number of interviewees amounts to N = 27.

Table 2: Client and firm structure

Panel A: Client structure	n=18	%
Industry		
C Manufacturing industry	13	19%
D Energy supply	11	16%
E Water supply	1	1%
F Construction	2	3%
G Trade	12	18%
H Transport and storage	3	4%
J Information and communication	4	6%
K Provision of financial and insurance services	5	7%
L Real estate and housing	5	7%
M Provision of freelance, scientific and technical services technical services	1	1%
N Provision of other business services	6	9%
S Provision of other services	2	3%
U Extra-territorial organization and corporate bodies	1	1%
n.a.	1	1%
Size		
Large	10	56%
Medium, Large	7	39%
Medium	1	6%
Legal form		
Corporation	10	56%
Partnership, Corporation	8	44%

Panel B: Firm structure	n = 7	%
Industry		
C Manufacturing industry	5	63%
G Trade	2	25%
H Transport and storage	1	13%
Size		
Large	7	100%
Legal form		
Corporation	5	71%
Partnership	1	14%
Mixed form	1	14%

Note: The table documents the sector, size category, and legal form of the clients of the tax advisors surveyed (Panel A) and the firms surveyed (Panel B). Respondents can select more than one sector, which is why the total number of responses exceeds the number of interviewees in this category. A maximum of one entry is possible for the size category and legal form. Regarding the size category as defined by Section 267 HGB shown in Panel A, "large" refers to tax advisors who predominantly advise firms in the large size category, "Medium, large" refers to that they predominantly advise large and medium-sized firms, and "medium" that they predominantly advise medium-sized firms. Accordingly, the legal form in Panel A indicates that tax advisors either predominantly advise only corporations or predominantly both corporations and partnerships.

Of the interviews with tax advisors, eleven were conducted with tax advisors from Big Four firms, and three were conducted with advisors from the Next Ten firms. We chose to interview tax advisors from these firms because their clients are primarily large and medium-sized firms¹⁶ (Table 2, Panel A). Firms of this size have been carrying out Tax CMS projects for several years (Eßer et al., 2020). The tax advisors either advise primarily corporations or primarily partnerships and corporations.¹⁷ The surveyed firms are exclusively large firms that primarily operate in the legal form of a corporation (Table 2 Panel B).

¹⁶ The clientele of #A13b consists mainly of large firms and a small proportion of small and medium-sized firms. As the interview responses were almost entirely provided by #A13a, the size category almost exclusively covered by #A13b and exclusively covered by #A13a will be considered for this interview in order to avoid distorting the results.

¹⁷ The tax advisors were asked to provide information about their clients. All interviewees had the option of selecting several answers for the business variable, which is why the number of answers given differs from the number of interviewees (N = 27).

Data analysis

The interviews are recorded and then transcribed into text by using a verbatim transcription.¹⁸ Since these are expert interviews in which the focus is on the content of the conversation rather than the individuals involved, the spoken words are transcribed into standard written German without recording any dialects or accents (Meuser & Nagel, 2002; Mayring, 2016).¹⁹ As part of the transcription process, the interviews are anonymized by replacing personal information with placeholders in square brackets. A total of 10 hours, 48 minutes, and 14 seconds of interview material was transcribed, resulting in 191 pages. We analyzed this material using Mayring's qualitative content analysis, which is a systematic and rule-based approach to analyzing text. This approach aims to highlight qualitative analysis steps in the focus of quantitative content analysis (Mayring, 1994). Mayring (1994) describes three techniques for qualitative content analysis. We use structuring content analysis below. The categories used for this analysis are derived deductively, i.e., based on theory and the interview guide. Table 6 in Appendix III shows the transcription rules used. Figure 10 in Appendix III documents the steps for deriving the coding guide.

IV. ANALYSIS

The results of the qualitative content analysis are presented below.²⁰ This analysis considers that tax advisors typically advise multiple clients, so they respond from a perspective that considers the collective experiences of those clients. This could lead tax advisors to overgeneralize, transferring effects observed with one client to all clients, even if the majority

¹⁸ In interview #A02, the recording was contradicted, which is why a detailed memory record was made. At his own request, #F07 initially answered the interview questions in writing and answered any follow-up questions to these written statements in the subsequent interview.

¹⁹ Accordingly, a conscious decision was made against creating transcripts in the style of the GAT rules and in favor of extended semantic-content transcription (Dresing & Pehl, 2018).

²⁰ Five interviews were conducted with more than one interviewee. As they made consistent statements in their interview that can be assigned to the same categories, their answers are consolidated - i.e. the answers are combined into one characteristic and presented in a key figure as if they had each been conducted with just one expert. Only these consolidated characteristics are taken into account in the analysis.

of them are not applicable (Epstein, 1992). Due to the small sample size, we use a qualitative research approach. The number of firms with experience using Tax CMS in tax audits is still too small for a quantitative analysis. Although the qualitative research approach provides meaningful insights, it is not possible to analyze the interview data using statistical methods and derive statements about statistically significant correlations. However, this qualitative analysis allows for a nuanced evaluation of the interview participants' statements and provides insights into the relationship between Tax CMS and tax audits that previous studies have not investigated.

Tax CMS in German firms and tax audits

Blaufus and Trenn (2018) analyze the status of Tax CMS implementation up to 2016, which was the beginning of the Tax CMS implementation wave in Germany. They based their analysis on a survey of German firms and created a Tax CMS index for the quality of the implemented systems. This laid an important foundation for research in this area. In our study, we investigate potential effects on the tax audit process. In line with Blaufus and Trenn (2018), we first analyze Tax CMS-specific characteristics, such as the proportion of German firms with a Tax CMS and with certification for their system, as well as the core areas for which these systems have been implemented. However, in our core analysis, we differentiate ourselves from this study by analyzing the potential impact of Tax CMS on the tax audit process. While Blaufus and Trenn (2018) find that only 11%²¹ of surveyed firms stated that they had implemented a Tax CMS, our 2023 survey of tax advisors finds that, on average, approximately 56% ($SD = 0.2846$) of their clients use Tax CMS. When the statements are analyzed depending on client structure, the results shown in

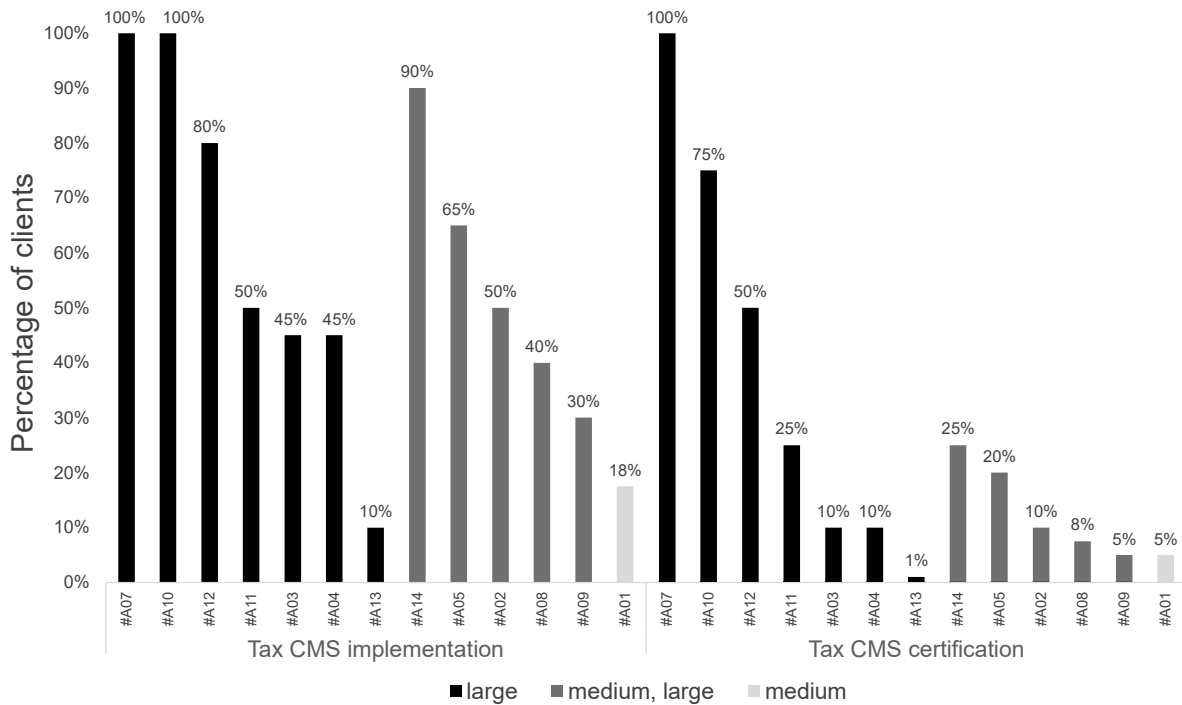
Figure 1 emerge. Tax advisors who only advise large clients estimate that around 61% ($SD = 0.3079$) of their clients use Tax CMS, on average. If the advisors also advise medium-sized firms, this proportion drops to around 55% ($SD = 0.2098$).²² Tax advisor who only advise medium-sized firms estimate the proportion of firms using Tax CMS to be even lower, at 18%. As

Figure 1 and Table 7 in Appendix IV show, Tax CMS are particularly important for large firms, and the proportion of implemented systems decreases as the firm's size decreases.

²¹ The results of the survey study by Blaufus and Trenn (2018) are based on the responses of 54 firms, the majority of which are family businesses. The authors provide the average size and financial ratios of these firms to determine the size category within the meaning of Section 267 HGB. Accordingly, the firms in their study clearly exceed the size criteria for large corporations on average, similar to our sample. Therefore, although our sample is smaller in terms of the number of observations compared to that of Blaufus and Trenn (2018), we consider it to be structurally similar.

²² This results in a difference of 6%, which, however, is not statistically significant (Table 10 in Appendix IV).

Figure 1: Proportion of Tax CMS implemented and certified depending on the client structure

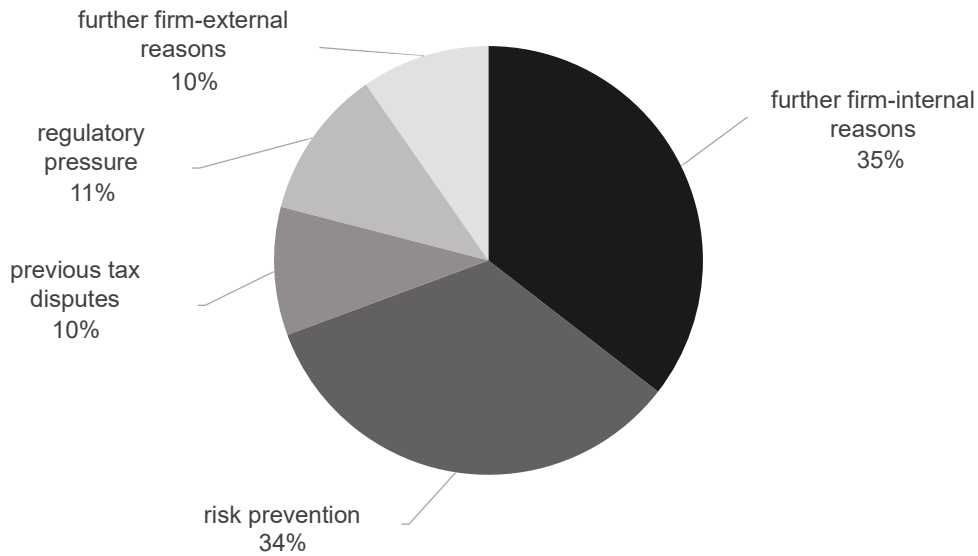


Note: The figure illustrates how the individual tax advisors surveyed (#A01 to #A13) estimate the proportion of their clients who have implemented and certified a Tax CMS. The chart differentiates between tax advisors who predominantly advise large firms (black bars), medium-sized and large firms (medium grey bars), and medium-sized firms (light grey bars) in accordance with Section 267 HGB. To illustrate the differences within the three size groups, the bars are sorted in descending order according to the proportion of implementation or certification.

In addition to the implementation, a Tax CMS can be certified as either appropriate or effective. Since the appropriateness test is carried out before the effectiveness test, the following explanations and figures relate to the appropriateness test. On average, tax advisors report that 26% (SD = 0.2923) of their clients have a Tax CMS certification. Differentiated by client size, 39% (SD = 0.3476) of the large firms, on average, have their Tax CMS certified. This proportion drops to 14% (SD = 0.0768) for advisors of medium-sized and large firms (Figure 1).²³ Similarly, 79% of tax advisors state that larger firms are more likely to have certified systems, and 36% add that certification is irrelevant for medium-sized firms (Table 8 in Appendix IV).

²³ There is a difference of 25% between these two groups, which is significant at a 10% level (Table 11 in **Error! Reference source not found.**)

Figure 2: Reasons for Tax CMS implementation



Note: The figure presents the reasons stated by respondents for implementing a Tax CMS. The categories to which the responses were assigned are shown. The "other internal firm reasons" mainly include process optimization, understanding, and improving the internal organization. In the "further firm-external reasons", respondents most frequently stated the pressure to adapt triggered by the use of Tax CMS by other firms.

The interviewees were also asked to name the three most important reasons why firms should implement a Tax CMS. Their answers fell into five main categories (

Figure 2). Overall, the most frequently cited reasons were *risk prevention* (34%) and other *firm-internal reasons* (35%), which include *process optimization* (15%) and *process understanding* (10%). The most frequently cited reason for implementation was *personal exemption from liability* (27%):

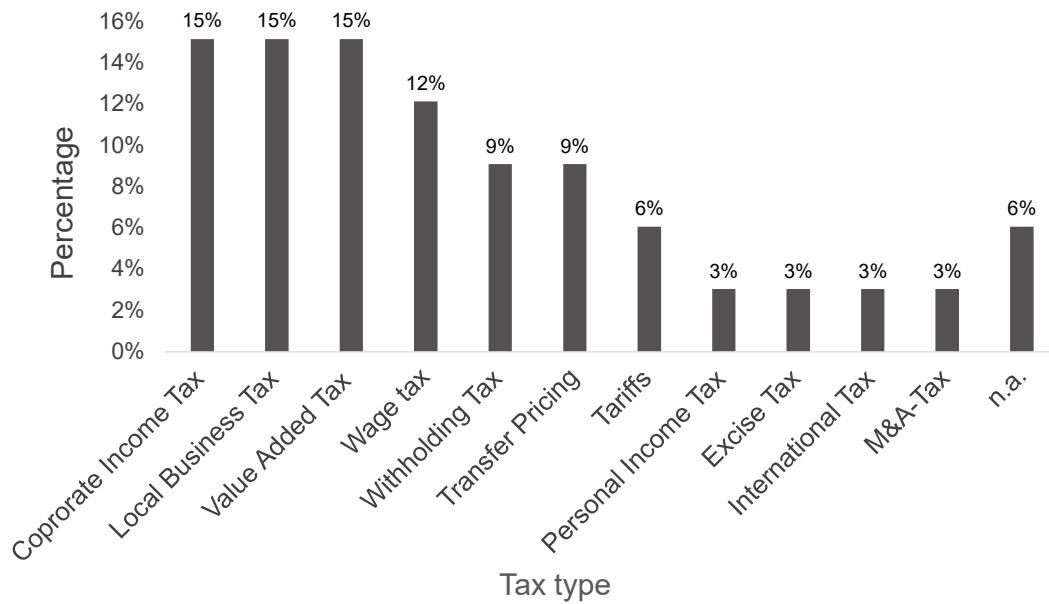
"So the most important [reason] is definitely the release of the management." (Interview with #F01)

In addition, *regulatory pressure* (11%) and *past tax disputes* (10%), particularly *conflicts arising from past tax audits* (8%), contribute to the decision in favor of a Tax CMS.

All of the surveyed firms have a Tax CMS that they implemented between 2016 and 2021, and predominantly for income, sales, and payroll taxes (

Figure 3). Of these firms, four (57%) opted for certification. Three of these firms only hold appropriateness certification, while one firm has also completed the effectiveness certification (Figure 4).

Figure 3: Tax CMS scope of the firms surveyed



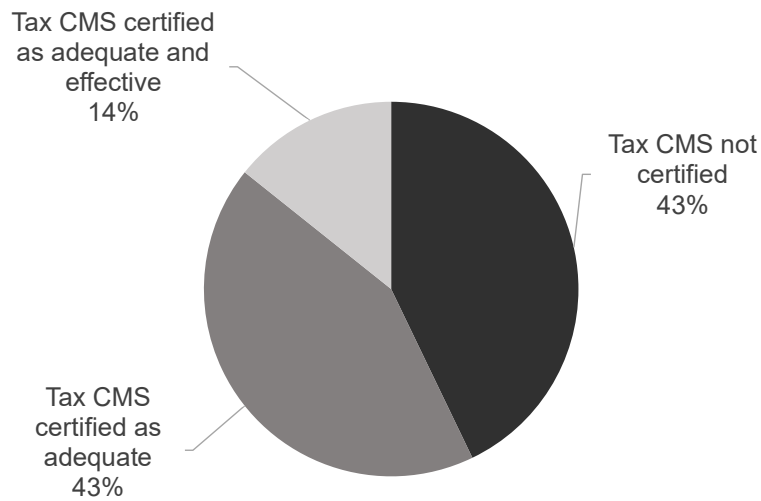
Note: The types of tax covered by the Tax CMS of the firms surveyed are shown.

#F01 justifies the decision against the certificate by stating that

"[...] the certifier can more or less decide for herself which criteria are used for certification. [...] so that the value of the certificate is also in question somewhere, and also the benefit at the end." (Interview with #F01)

From the firm's point of view, it is desirable to standardize the certification criteria and describe the benefits of this certificate.

Figure 4: Proportion of Tax CMS certification of the firms surveyed



Note: The figure shows the proportion of firms surveyed that have a certification for their Tax CMS. A distinction is made between no certification, a Tax CMS certified as adequate only, and a Tax CMS certified as adequate and effective.

The tax advisors' perspective confirms that certification can incur costs for firms without offering any recognizable benefits:

"The benefit occurs because the functioning system gives impunity [...]. I don't need a certificate for that. [...] The more afraid they are, the more they certify." (Interview with #A13a)

A tax advisor supplements the cost perspective with the following statement:

"With appropriateness audits, you're very quickly in the six-figure cost range, even in SMEs. And many firms say: "What am I supposed to do with that?"" (Interview with #A04)

Another obstacle to external certification by an auditor stems from the "DAC 7" Implementation Act because Section 38 (1) EGAO stipulates that tax authorities must evaluate the effectiveness of the tax control system to grant tax audit relief. As #F02 adds in the interview:

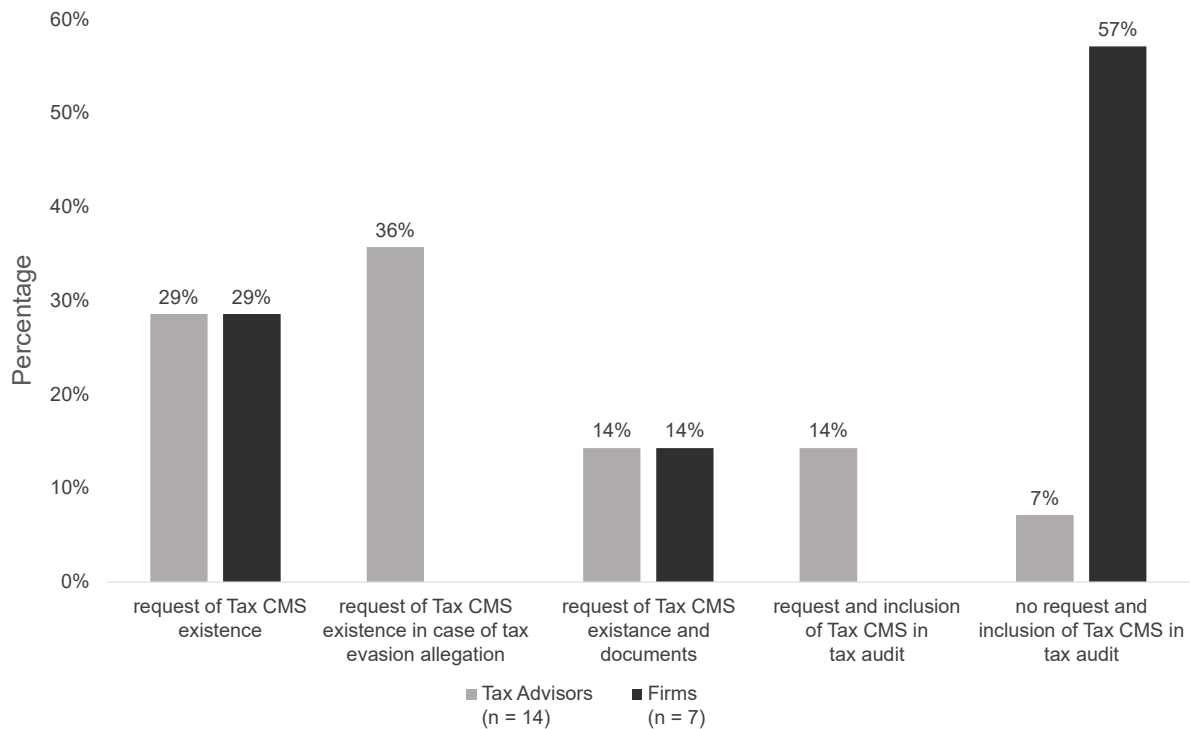
"[...] if the tax authorities want to do it themselves, there is ultimately no point in having an external auditor do it." (Interview with #F02)

71% of respondents state that certification has not yet been queried or otherwise included by the auditors as part of an audit (Table 9 in Appendix IV).

In summary, Tax CMS are becoming increasingly relevant in medium-sized and large German firms. This is evident from personal exemption from liability, improved process understanding, and optimized processes within the firm. Firms are also increasingly interested in Tax CMS certification because they expect it to provide additional legal certainty. As a positive side effect of the certification, #F06a also states that the certification process has improved the Tax CMS. However, the responses from firms and tax advisors also indicate that these certificates are not (yet) used as additional information in tax audits.

As mentioned earlier in this study, it is necessary to define the legal framework for establishing an effective Tax CMS and the regulations for certifying the system. This is particularly important for reducing legal uncertainty for firms. However, it can be assumed that the concretization of existing regulations, which generally occurs with a time delay, does not always improve the framework conditions for companies in a timely manner and cannot keep pace with technological developments. Against this backdrop, although we cannot directly deduce this from our survey, we assume that certification will likely provide more legal certainty for firms in the future if the review of the Tax CMS is simplified in subsequent tax audits.

Figure 5: Inclusion of Tax CMS in German tax audits



Note: The figure illustrates, separately for tax advisors and firms, whether and to what extent Tax CMS has been considered in German tax audits to date.

As shown in Figure 5, 7% of tax advisors report that they are never asked about the presence of a Tax CMS during a tax audit. The remaining 93% state that a corresponding inquiry is made. Of the 93%, 36% of tax advisors state that they are only asked about the existence of a Tax CMS if the firm is accused of tax evasion and Section 153 AO applies. A further 29% state that this is also the case during regular tax audits without such accusations. Additionally, according to two tax advisors' interview responses, data from the Tax CMS is actively included in the analysis, primarily by younger tax auditors (#A04). This inclusion can result in audit simplifications for firms, though they are not available to everyone:

"[...] Up to now, it was done under the table. It was the landlord's way; if they were lucky, they got favors. But they themselves had no legal claim to them." (Interview with #A08)

However, from a firm's perspective, the picture is different. 57% report that their Tax CMS was neither queried nor included in a tax audit. Of the remaining 43%, a tax auditor has queried

the existence of a Tax CMS; however, no firm reports that the system was included in the auditor's analysis (Figure 5).

When interpreting these results, it is worth noting that the tax advisors include the experiences of several clients in their responses, while the employees in the tax departments only responded on behalf of their firm. It is striking that none of the firms stated that the Tax CMS was queried during an allegation of tax evasion in tax audits, as compared to the responses of tax advisors. Tax advisors, on the other hand, report that the Tax CMS was queried in connection with allegations of tax evasion. This is the most frequent response among tax advisors. This information suggests that Tax CMS are primarily queried in tax audits in connection with allegations of tax evasion. It is unclear whether tax auditors also consider certification as an indication in this context. One possible explanation for why tax advisors report on the use of Tax CMS in connection with allegations of evasion, while surveyed firms do not is that the firms are not currently facing such claims or did not report this information during the interview. Another possible explanation for the differing assessments is that auditors may be entering a legal grey area by asking about the existence of a Tax CMS. For example, one tax advisor describes how the existence and validity of the Tax CMS is queried when a tax audit is initiated, explaining the legal problems of this procedure as follows:

"[...] You then run into a legal loophole, because the tax audit is actually only allowed to request documents [...] in response to specific indications. [...] If they simply say: "Provide us with your Tax CMS." that's no reason [...]." (Interview with #A04)

Our interviews show that the firms nevertheless disclose information to auditors out of fear of being penalized (#A04). This suggests that the irregular inclusion of Tax CMS in tax audits, beyond merely inquiring about its existence, is due to an inadequate legal basis, among other things. This legal loophole was only closed on January 1, 2023, as part of the "DAC 7" Implementation Act and Section 38 EGAO. Another reason for the rather rudimentary inclusion

of Tax CMS in audits thus far is the lack of understanding of Tax CMS among some tax auditors:

"[...] Most or many auditors don't even see the consequences of this. [...] They look at it and say: "Yes, fine, yes, what do I do with it now?". [...] They do their document samples anyway." (Interview with #A04)

However, as a result of the introduction of Section 38 EGAO, tax advisors expect these systems to be considered more frequently in the future. Thus #A04 assumes:

"[...] I believe this is a cultural change that we can observe [...] over the course of the next ten years." (Interview with #A04)

Table 3: Opportunities arising from the inclusion of Tax CMS in tax audits

Opportunities	N = 21	%
Tax Audit optimization	17	36%
Faster tax audits	8	17%
Reduction in the scope of tax audits	4	9%
Timely tax audits	3	6%
Digitalization of the tax audit	1	2%
Improved audit quality	1	2%
Firm organization	11	23%
Digitalization of the control function	3	6%
Argumentation basis for budgets	2	4%
Process understanding	2	4%
Process optimization	2	4%
Follow-up and implementation of tax audit findings	1	2%
Implementation of laws	1	2%
Improved relationship with tax authorities	9	19%
Improved cooperation and mutual Trust	5	11%
Fewer tax disputes	3	6%
Positive reputational impact	1	2%
Risk reduction	8	17%
Reduced monetary risks	3	6%
Reduced liability risks	2	4%
Error reduction and compliance optimization	2	4%
Reduced reputational risks	1	2%
Cost efficiency	2	4%
Lower compliance costs	1	2%
Lower litigation costs	1	2%

Note: The table shows the opportunities expected by tax advisors from the inclusion of Tax CMS in tax audits. The partial results may deviate from the sum of the items contained therein due to rounding to whole numbers.

The most frequently mentioned opportunity of a Tax CMS at 36%, is tax audit optimization (Table 3). For example, respondents expect faster (17%) and timelier (9%) tax audits in the future due to the involvement of a Tax CMS. Additionally, 19% of respondents expect *improved relationships with tax authorities*, resulting in fewer tax disputes, enhanced cooperation, and greater mutual trust.

However, 46% of respondents identify risks associated with the tax audit process (Table 4). These risks are primarily expected due to increasing transparency and the associated potential focus of tax auditors on *risk areas of the firm* (21%), as well as an *extended audit scope* (14%). Nevertheless, 38% of respondents do not anticipate any risks from including Tax CMS in tax audits. This is because, although risks are openly communicated to auditors, firms can simultaneously provide evidence of the implemented controls.

Table 4: Risks from the inclusion of Tax CMS in tax audits

Risks	N = 21	%
Tax audit process	13	46%
Focus on risk areas of the firm	6	21%
Extended audit scope	4	14%
Revealing mistakes from the past	2	7%
Process documentation	1	4%
Other risks	4	14%
Cost increase	2	7%
Data protection risks	1	4%
Growing bureaucracy	1	4%
Internal handling of the Tax CMS	3	11%
Employees become careless	2	7%
Overestimation of Tax CMS effect	1	4%
No risks	8	29%

Note: The table shows the risks expected by tax advisors from the inclusion of Tax CMS in tax audits. The partial results may deviate from the sum of the items contained therein due to rounding to whole numbers.

Our interviews describe (#A10) that, in the future, the focus will shift from whether a check has been carried out to whether it is the right check for the purpose at hand:

*"That's why I honestly don't think you can do much wrong with more transparency."
(Interview with #A10)*

Interview participant #F03 confirms that transparency improves documented compliance and reduces the risk of tax evasion and adds the following:

"In this respect, transparency is not associated with risks for us, but only with advantages." (Interview with #F03)

To summarize, our interviews with representatives from firms and consulting firms reveal that more than half of the clients of the interviewees from the tax consulting sector already use Tax CMS. Around a quarter of clients are certified, though this is generally considered relatively unimportant for tax audits. The main reasons cited for implementing a Tax CMS are process optimization and management's personal exemption from liability, both of which are considered essential. Among firms, 43% report that their Tax CMS is queried in audits. Among tax consultancies, around 80% report that their clients' Tax CMS is queried in tax audits.

Against this background, it is essential to clarify what specific experiences have been made with the use of Tax CMS in tax audits.

V. THE EFFECT OF TAX CMS ON TAX AUDITS

Duration and scope of tax audits

Although Tax CMS has been considered quite rudimentary in tax audits thus far, changes to certain parameters of the audit process related to these systems are possible.

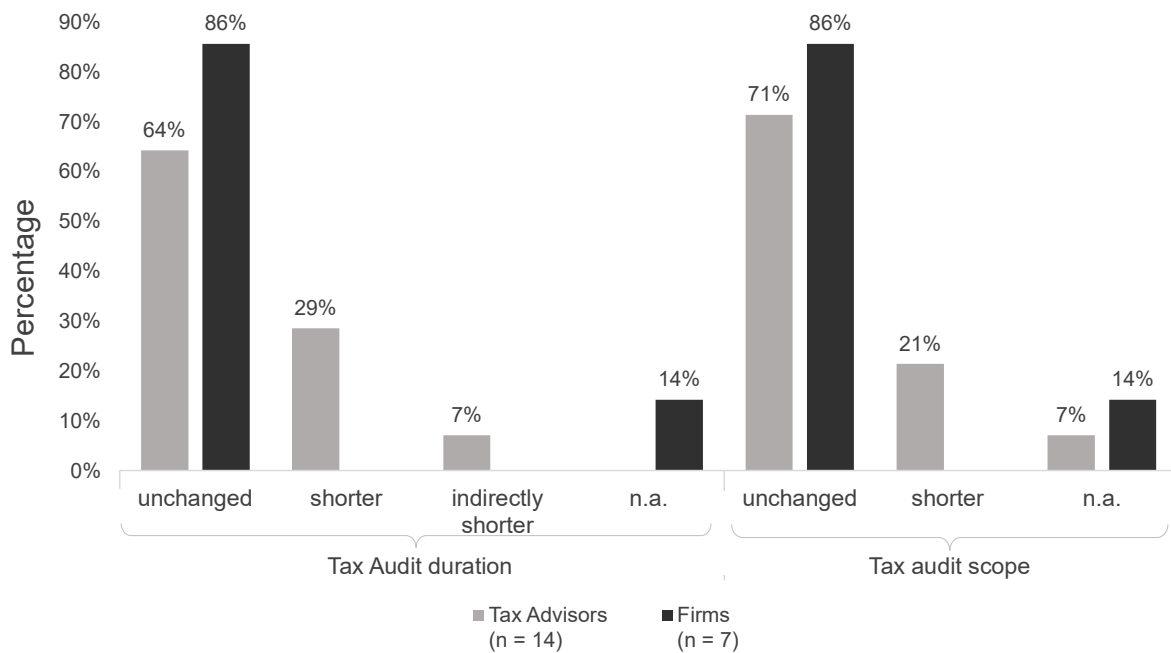
Figure 6 shows that 64% of the surveyed tax advisors do not see a difference in the *duration of tax audits* between firms using and not using a Tax CMS. Interviewees believe such positive effects will only become noticeable after a few years and that the "DAC 7" implementation law could help drive this change. One tax advisor responded to the question of whether he could notice differences in the two areas:

"No. Not at the moment, because for me it is, also relatively logically, a voluntary event [...] for taxpayers. There is no binding effect for the tax authorities." (Interview with #A10)

The Respondent also describes that a Tax CMS rather:

"contributed to an improvement in the audit climate [...]." (Interview with #A10)

Figure 6: Effect of Tax CMS on the duration and scope of tax audits



Note: The figure shows the extent to which respondents perceive that the duration and scope of tax audits have changed due to the use of a Tax CMS. "Indirectly shorter" means that the duration of tax audits has been shortened due to process optimizations within the firm and improved tax compliance resulting from the Tax CMS. Conversely, "shorter" indicates that the changes are directly caused by the implementation of the system, resulting in tax auditors shortening the audit duration and scope.

However, 36% of tax advisors report having definitely noticed a reduction in the duration of tax audits. For example, respondent #A08 indicates that the *duration of tax audits* for one client has decreased from nine months to two months following the implementation of the Tax CMS. It is important to note the potential for overgeneralization in the responses of the tax advisors. It is possible that the positive impacts are not visible for all clients using Tax CMS. This is supported by firm assessments, with 86% of firms not perceiving any influence on the duration of tax audits. For instance, some advisors report shorter audit durations for their clients, but the

firms in our sample do not. Advisors who report shorter durations work with large and medium-sized firms. Therefore, it is possible that Tax CMS primarily reduce audit durations for medium-sized firms. In contrast, larger firms—such as those in our study—may not experience this effect.

Regarding the *scope of tax audits*, 71% of tax advisors reported that it remained unchanged. 86% of firms shared this assessment. Regarding potential future simplifications, #F04 states:

"Germany has the big question of where the tax audit could grant relief at all or could audit less and rely on the process. [...] I don't think much will come of it, that's my personal opinion." (Interview with #F04)

To summarize, the majority of respondents did not report any changes in the duration (71%) or scope (75%) of tax audits. This indicates that the two expected effects were not observed.

Interestingly, among the sample of tax advisors, the client structure appears to influence their perception. Tax advisors who also advise medium-sized firms tend to notice a reduction in the duration and scope of audits, unlike those who advise only large firms. The fact that the surveyed firms are exclusively large and subsequently audited²⁴ suggests a possible size-dependent effect as these firms do not perceive any impact on the duration or scope of their audits. One firm adds:

"We've become incredibly granular. Nothing has become faster; you can forget that. [...] An audit takes us a year, [...] with nine to ten auditors. And if they have more time, then they examine more deeply." (Interview with #F05b)

These size-dependent differences indicate the need for further research. More extensive empirical studies are required to test the significance of these correlations based on a broader database in the future.

²⁴ In Germany, large firms (as defined in Section 3 BpO), in contrast to firms of other sizes, are subject to a follow-up audit - they are therefore subject to a continuous audit (Section 4 para. 2 BpO).

Number of tax disputes and amount of back tax payments

The following analysis examines the results of the interview study concerning changes in the *number of tax disputes* and the *amounts of back taxes paid* (Figure 7). The statements about the impact on the *number of tax disputes* are ambiguous. The proportion of tax advisors who cannot identify any change in the number of tax disputes attributable to the Tax CMS (36%) is equal to the proportion of those who perceive fewer tax disputes. For example, respondent #A06c, who perceives the number of tax disputes as unchanged, argues that a Tax CMS recognizes many risks:

"[...] but that doesn't mean you've covered all the risks." (Interview with #A06c)

Overall, #A06c does not see tax disputes as declining because new disputes emerge elsewhere.

Other tax advisors take the opposite view:

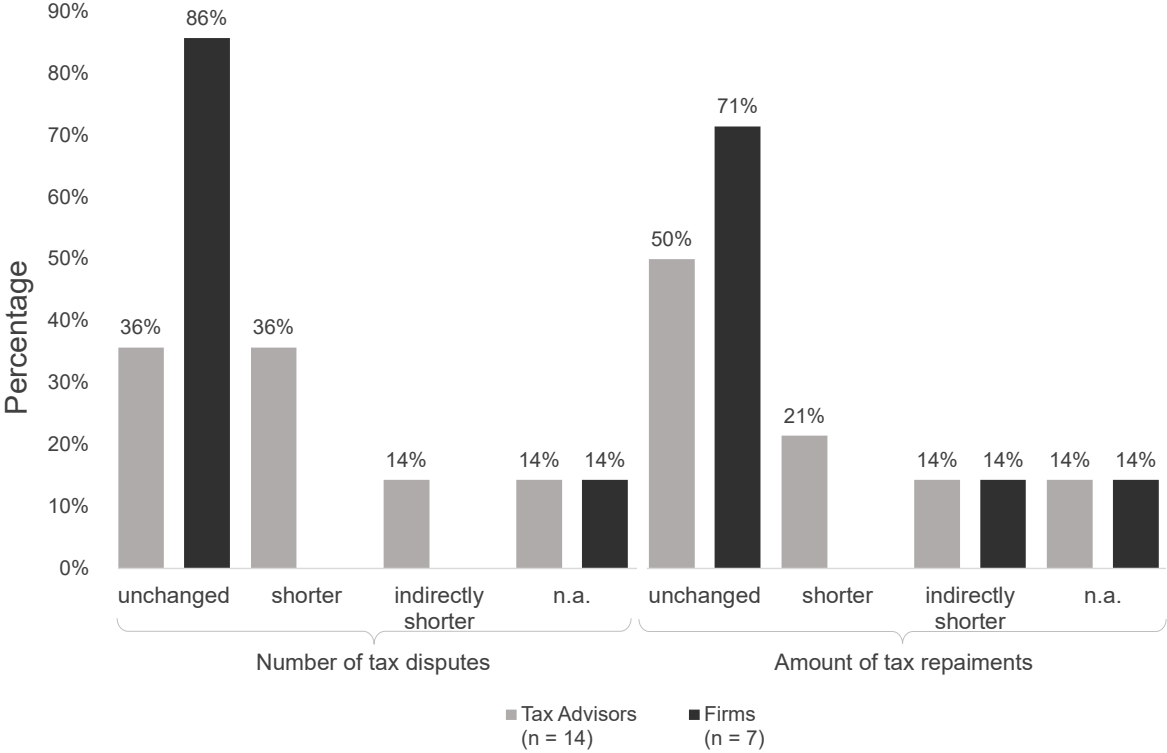
"Positive correlation, tax compliance management system leads to lower back payments, leads to fewer disputes." (Interview with #A08)

Unlike the perception of tax advisors, 86% of firms report no change in the number of tax disputes after implementing a Tax CMS. According to the firms' representatives, this is due to a lack of consideration and insufficient in-depth understanding of Tax CMS during the tax audit:

"The fact that the topic of CMS is ignored by the financial administration [...] means that it can ultimately have no effect." (Interview with #F02)

Once again, tax advisors' assessments differ from those of firms.

Figure 7: Effect of Tax CMS on the number of tax disputes and the amount of back tax payments



Note: The figure shows the extent to which respondents perceive that the number of tax disputes and the amount of back tax payments have changed due to the use of a Tax CMS. "Indirectly lower" means that tax disputes and back tax payments have decreased because of process improvements within the firm and better tax compliance resulting from the Tax CMS. Conversely, "lower" indicates that the changes are directly caused by the implementation of the system, leading to fewer tax disputes and back payments.

The statements from tax advisors and firms regarding the *amount of back tax payments* show a similar pattern. 71% of firms and half of tax advisors do not perceive any change in the amount of back taxes paid due to Tax CMS. One reason given is the type of errors that lead to the largest back tax payments. Interviewee (#A04) said these errors are not procedural, so Tax CMS cannot reduce the back payment. Rather, they are individual case decisions, where firms and tax auditors interpret situations differently. However, 21% of tax advisors do experience a reduction in back tax payments. They claim that this is because Tax CMS improves the tax audit environment, and therefore:

"[...] if it really does get to the point where penalties are imposed, then of course there will also be a reduction." (Interview with #A10)

On the one hand, such positive effects may result from less tax-aggressive behavior by firms.

On the other hand, a decrease in back tax payments may also stem from improvements in internal tax processes, which are associated with fewer tax-related errors and compliance violations. In our study, 14% of both tax advisors and firms view this as an indirect decrease in back tax payments.

In summary, the results show that both firms and tax advisors recognized isolated decreases in *back tax payments* due to the Tax CMS. However, most respondents believe that the total amount of back taxes paid has not changed. Although 50% of tax advisors see an (indirect) decrease in *tax disputes*, firms' respondents do not share this view. They also complain about increased granularity and disputes over small amounts. This suggests that setting a materiality threshold might be useful. Therefore, it is unclear whether Tax CMS generally improve the tax audit environment by increasing corporate transparency.²⁵

Focal points of tax audits

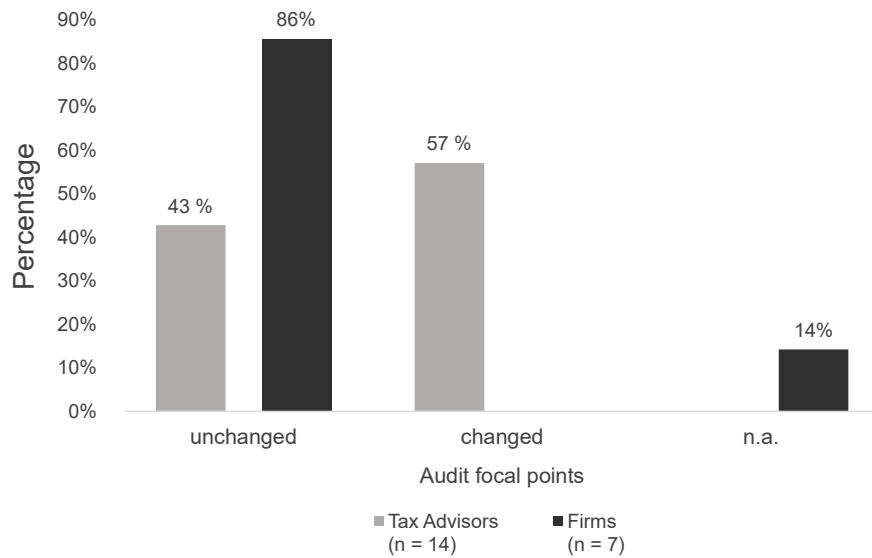
The effect of the Tax CMS on the *focal points of tax audits* is examined below. As Figure 8, 43% of tax advisors have not observed any change in audit focus due to Tax CMS. 86% of the firms surveyed share this perception.

In addition to the focal points of the audit, they also see the type of examination as unchanged:

"To date, it is still very much based on individual document checks [...], [...] so no process or system checks at all [...]." (Interview with #F02)

²⁵ Compliance with tax regulations, the occurrence of disputes and back tax payments also depend on the balance of enforcement (e.g. through penalties for infringements) and trust and the assessments of all stakeholders in this regard (*slippery slope framework*, cf. Kirchler et al. (2008)). Assuming that a relationship of trust is established with the right balance, a Tax CMS can lead to a reduction in compliance costs, including tax risk hedging costs for firms. Lower additional payments can also be expected in the future. However, our findings indicate that these relieving effects have not yet materialized.

Figure 8: Effect of Tax CMS on tax audit focal points



Note: The figure shows the extent to which respondents perceive that the use of Tax CMS has changed the tax audit focal points.

However, 57% of tax advisors recognize a shift in the focus of tax audits. Two of these advisors noted a change in the firm's risks, as shown in the risk-control matrix. One interviewee (#A10) perceives this shift as an increase in efficiency because tax auditors can identify risks without conducting time-consuming document checks. Additionally, firms can demonstrate the controls they have implemented, preventing any disadvantages. An additional 36% of tax advisors responded that audits are shifting from document-based to process-based. This shift could lead to shorter tax audit durations and promote cooperative approaches, such as horizontal monitoring. These approaches align with the desired effects of a Tax CMS. In our interview study, these changes in focus are especially noted among younger tax auditors (#A04).

In summary, more than half of tax advisors perceive a change in the focus of audits. However, this perception is not shared by the firms surveyed. One possible reason for this discrepancy is that tax advisors are less involved in all tax audit inquiries and can only evaluate changes in the inquiries in which their firm actively participates. Additionally, tax advisors base their responses on their experience with multiple clients. It is possible that they have

experienced changes with individual clients that the firms in our sample have not. As discussed above, these differences in assessments are also likely due to the size discrepancy between the two sub-samples: tax advisors and firms. All the reliefs we examined depend heavily on the individual tax auditor and are not granted to every firm. This also underscores the idea that a change in audit focus is primarily noticed in audits conducted by younger auditors.

Furthermore, firms argue that a shift toward process audits will only occur if there are changes in financial management.

"They have their special topics, which they then focus on according to the internal financial management agreement. [...] But that has nothing [to do] with TCMS and the thematic focus." (Interview with #F03)

Therefore, they do not anticipate a change caused by the tax auditors. According to our interviews, tax advisors especially expect such future shifts in focus, which most people can interpret as an opportunity to develop shorter, more efficient tax audits.

Compliance costs

Finally, we analyze whether the respondents expect a Tax CMS implementation to reduce future corporate compliance costs. As shown in Figure 9, half of the tax advisors do not expect a reduction in compliance costs.

Instead, a

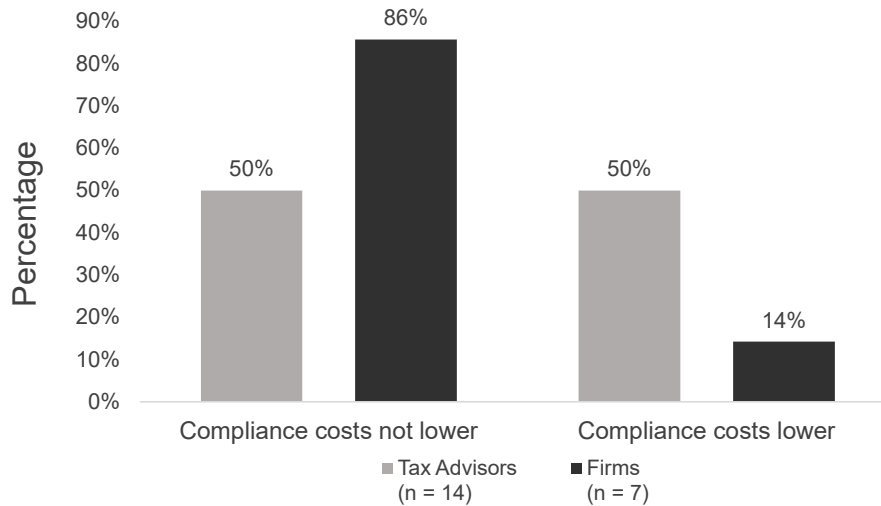
"[...] stable basis of compliance costs" (Interview with #A11)

is expected.

This is justified by the fact that, in addition to the implementation costs, Tax CMS also incur expenses for system maintenance and content updates. Therefore, the benefit of Tax CMS does not lie in cost savings:

"[...] you manage to improve with it. Maybe at the same cost, because you are more efficient, but it doesn't get cheaper overall, it gets better overall." (Interview with #A10)

Figure 9: Influence of Tax CMS on firms' compliance costs



Note: The figure shows whether respondents expect Tax CMS implementation to result in lower compliance costs for firms in the future.

86% of the firms surveyed share this view. One possible reason for this assessment is that the one-off costs of implementing a Tax CMS are overestimated, and the resulting future cost savings are underestimated. Similar results were found in research on the increased perception of one-off property tax payments compared to annual payments (Chirvi et al., 2022).

The other half of tax advisors justify their expectation of lower future compliance costs by stating that optimized and better-documented tax processes will reduce the time employees spend answering auditors' queries during a tax audit. Furthermore, the Tax CMS can make the complexity manageable, especially for firms that operate internationally, thereby reducing compliance costs:

"[...] the more complex the [business] is, the more international it becomes, [...] the quicker a tax compliance management system pays for itself [...]." (Interview with #A08)

A breakdown of the responses according to client structure shows that 71% of tax advisors who expect reduced compliance costs in the future exclusively serve large clients. Future empirical

research with larger samples should investigate whether a reduction in compliance costs is actually linked to firm size and whether these costs will be significantly reduced, particularly for large firms. The statements of 86% of firms that do not expect a difference in compliance costs suggest that a size-dependent effect is unlikely. One reason for the opposing perceptions of the two groups may be that external tax compliance costs – including advisor costs – are lower as processes are optimized and fewer consulting services are required. At the same time, however, internal compliance costs may increase due to the growing documentation effort and system maintenance. Overall, firms' tax compliance costs would therefore not change, only their structure. Accordingly, #F06b:

"[...] it's difficult to say [...] I think it outweighs itself." (Interview with #F06b)

Overall, a reduction in compliance costs associated with a Tax CMS cannot be expected for all firms. A more detailed assessment is essential to consider firm-specific factors and the relationship between the complexity of the tax system and the complexity of the respective business model.

In summary, firms have taken the first step toward reforming tax auditing practices in Germany by implementing TAX CMS and adopting transparent behavior toward tax authorities. However, in the next step, it is necessary for tax auditors to be more closely involved and for a mutual understanding of Tax CMS to be established. This is essential to realize synergies for firms and tax authorities through Tax CMS, as well as to strengthen planning certainty, compliance, and efficiency when complying with tax regulations.

VI. CONCLUSION AND OUTLOOK

This study aims to answer the question of what impact Tax CMS have on German tax audit processes. To this end, we analyze the effect of Tax CMS on audit duration, audit scope, back tax payments, the number of tax disputes, and audit focal points as observed by tax advisors and firms.

The results of the interview study indicate that although Tax CMS are becoming increasingly relevant for firms and the tax authorities, they have not yet led to significant tax audit relief for firms, according to taxpayers and advisors. Most tax advisors and firms do not perceive a reduction in *audit duration*, *audit scope*, or *the amount of back tax payments* due to Tax CMS. However, a more differentiated picture emerges beyond this. While firms do not perceive a reduction in *tax disputes*, half of surveyed tax advisors see an (indirect) reduction in tax disputes caused by Tax CMS. Tax advisors report that they experience an improvement in the tax audit environment, namely, less potential for conflict. They also perceive a shift in audit focus, particularly an increase in efficient and resource-saving process audits, which they view positively.

These findings are important because the change in the regulatory environment for Tax CMS, particularly the implementation of the "DAC 7" law, are expected to impact German tax audit processes more significantly in the coming years. Both firm employees and tax advisors confirm that Tax CMS will increasingly be considered in tax audits, which may affect the audit duration, scope, focus, number of tax disputes, and back tax payments. The interviewees we surveyed reported no negative changes in the tax audit process or additional burdens associated with including Tax CMS. This further supports the expectation of positive future effects. In this context, the interviewees consider it necessary to specify the regulations for implementing and certifying Tax CMS. They also consider more specific framework conditions for including Tax CMS in tax audits and reliable regulation of the resulting potential tax audit relief particularly important.

Our results should be interpreted in light of the following limitations. First, the surveyed employees from firms sometimes arrive at different assessments than the tax advisors, which could be due to differences in experience and our relatively small sample size. Additionally, the respondents from the tax consultancy may have overgeneralized positive experiences with

individual clients and transferred these Tax CMS effects to all clients. Self-interest bias should also be considered, as it could cause firms to present Tax CMS effects too negatively and advisors to present them too positively due to concerns about high compliance costs and the countervailing benefits.

A qualitative analysis with a small sample size cannot generalize the findings for German firms as a whole or for other countries. However, the analysis provides valuable insights into the experiences of firms with such systems. It also offers a starting point for future research, which supports quantitative empirical analyses. Building on this study, the experiences and consequences of the established use of Tax CMS should be collected through surveys and analyzed following broader implementation. Including the perspective of the tax authorities would also be desirable. Since our study focuses on Tax CMS at German firms, it would be interesting to consider the effects of Tax CMS at firms with subsidiaries and permanent establishments abroad, particularly in connection with transfer pricing audits. This could further enhance our understanding of the strengths and weaknesses of utilizing Tax CMS and highlight potential areas for improvement in a more differentiated manner.

REFERENCES

- Arbeitskreis Verrechnungspreise der Schmalenbach-Gesellschaft. (2022). Chancen und Risiken eines Cooperative-Compliance-Ansatzes aus Sicht multinational tätiger deutscher Unternehmen. *Internationales Steuerrecht*, 22, 824–829.
- Batrancea, L., Nichita, A., Olsen, J., Kogler, C., Kirchler, E., Hoelzl, E., Weiss, A., Torgler, B., Fookan, J., Fuller, J., Schaffner, M., Banuri, S., Hassanein, M., Alarcón-García, G., Aldemir, C., Apostol, O., Bank Weinberg, D., Batrancea, I., Belianin, A., ... Zukauskas, S. (2019). Trust and power as determinants of tax compliance across 44 nations. *Journal of Economic Psychology*, 74(Issue C). <https://doi.org/10.1016/j.joep.2019.102191>
- Bauer, A. M. (2016). Tax Avoidance and the Implications of Weak Internal Controls. *Contemporary Accounting Research*, 33(2), 449–486. <https://doi.org/10.1111/1911-3846.12151>
- Beer, S., Kasper, M., Kirchler, E., & Erard, B. (2020). Do Audits Deter or Provoke Future Tax Noncompliance? Evidence on Self-Employed Taxpayers. *CESifo Economic Studies*, 66(3), 248–264. <https://doi.org/10.1093/cesifo/ifz018>
- Betriebsprüfungsordnung 2000 (BpO 2000) (2000).
- Blaufus, K., Reineke, J., & Trenn, I. (2023). Perceived Tax Audit Aggressiveness, Tax Control Frameworks and Tax Planning: An Empirical Analysis. *Journal of Business Economics*, 93(3), 509–557. <https://doi.org/10.1007/s11573-022-01116-6>
- Blaufus, K., & Trenn, I. (2018). Tax Compliance Management – Ergebnisse einer Befragung mittelständischer Unternehmen. *Steuer Und Wirtschaft*, 95(1), 42–59. <https://doi.org/10.9785/stuw-2018-950107>
- Blumenthal, M., & Slemrod, J. B. (1995). The compliance cost of taxing foreign-source income: Its magnitude, determinants, and policy implications. *International Tax and Public Finance*, 2(1), 37–53. <https://doi.org/10.1007/BF00873106>
- Brühne, A. I., & Schanz, D. (2022). Defining and Managing Corporate Tax Risk: Perceptions of Tax Risk Experts. *Contemporary Accounting Research*, 39(4), 2861–2902. <https://doi.org/10.1111/1911-3846.12785>
- Buck, R., & Klopfer, M. (2011). *Betriebsprüfung: Grundlagen, Ablauf, Prüfungsbericht* (1. Auflage). Gabler.
- Bundesministerium der Finanzen. (2016). Anwendungserlass zu § 153 AO. *BMF-Schreiben*, *BMF v. 23.05.2016-IV A 3-S 0324/15/10001 IV A 4-S 0324/14/10001 BStBl 2016 I S. 490*.
- Bundesministerium der Finanzen. (2022). *Monatsbericht des BMF: Oktober 2022* (Monatsbericht Des BMF). Bundesministerium der Finanzen. Abrufbar unter: https://www.bundesfinanzministerium.de/Content/DE/Downloads/Broschueren_Best_ellservice/monatsbericht-oktober-2022.pdf?__blob=publicationFile&v=4

- Chirvi, M., Huber, H.-P., & Schneider, C. (2022). Biased Preferences for Wealth Taxation: The Case of Misperceived Tax Burden Consequences. *TRR 266 Accounting for Transparency Working Paper Series, No. 54*. <https://doi.org/10.2139/ssrn.3876472>
- Darke, P. R., & Chaiken, S. (2005). The pursuit of self-interest: Self-interest bias in attitude judgment and persuasion. *Journal of Personality and Social Psychology*, 89(6), 864–883. <https://doi.org/10.1037/0022-3514.89.6.864>
- De Widt, D., & Oats, L. (2017). Risk Assessment in a Co-operative Compliance Context: A Dutch–UK Comparison. *British Tax Review*, 2007(2), 230–248. <https://doi.org/10.1086/684037>
- Dresing, T., & Pehl, T. (2018). *Praxisbuch Interview, Transkription & Analyse: Anleitungen und Regelsysteme für qualitativ Forschende* (8. Auflage). Eigenverlag.
- Dubin, J. A., & Wilde, L. L. (1988). An Empirical Analysis of Federal Income Tax Auditing and Compliance. *National Tax Journal*, 41(1), 61–74. <https://doi.org/10.1086/NTJ41788709>
- Dyck, D., Lorenz, J., & Sureth-Sloane, C. (2025). Tax Disputes—The Role of Technology and Controversy Expertise. *TRR 266 Accounting for Transparency Working Paper Series No. 101*. <https://doi.org/10.2139/ssrn.4214449>
- Eberhartinger, E., & Zieser, M. (2021). The Effects of Cooperative Compliance on Firms' Tax Risk, Tax Risk Management and Compliance Costs. *Schmalenbach Journal of Business Research*, 73(1), 125–178. <https://doi.org/10.1007/s41471-021-00108-6>
- Eichfelder, S., & Hechtner, F. (2018). Tax Compliance Costs: Cost Burden and Cost Reliability. *Public Finance Review*, 46(5), 764–792. <https://doi.org/10.1177/1091142117691603>
- Eichfelder, S., & Vaillancourt, F. (2014). Tax Compliance Costs: A Review of Cost Burdens and Cost Structures. *Revista Hacienda Pública Española / Review of Public Economics*, 210(3), 111–148. <https://doi.org/10.7866/HPE-RPE.14.3.5>
- Epstein, S. (1992). Coping ability, negative self-evaluation, and overgeneralization: Experiment and theory. *Journal of Personality and Social Psychology*, 62(5), 826–836. <https://doi.org/10.1037/0022-3514.62.5.826>
- Eßer, M., Blecken, H., Eversmann, J., Herrgesell, A., Parczanny, T., & Siegel, R. (2020). Studie zum Stand der Implementierung von Tax Compliance Management Systemen. *PwC*. Abrufbar unter: <https://www.pwc.de/de/steuerberatung/pwc-tcms-studie-2020.pdf>
- Fettke, P. (2019). Digitale Betriebsprüfung. In T. Klenk, F. Nullmeier, & G. Wewer (Eds.), *Handbuch Digitalisierung in Staat und Verwaltung* (pp. 1–12). Springer Fachmedien Wiesbaden.
- Fochmann, M., Heinemann-Heile, V., Huber, H.-P., & Sureth-Sloane, C. (2023). Firms' Tax Rate Misperception: Measurement, Drivers, and Distortionary Effects. *TRR 266 Accounting for Transparency Working Paper Series No. 108*. <https://doi.org/10.2139/ssrn.4300919>

- Gallemore, J., & Labro, E. (2015). The importance of the internal information environment for tax avoidance. *Journal of Accounting and Economics*, 60(1), 149–167. <https://doi.org/10.1016/j.jacceco.2014.09.005>
- Gangl, K., Hartl, B., Hofmann, E., & Kirchler, E. (2019). The Relationship Between Austrian Tax Auditors and Self-Employed Taxpayers: Evidence From a Qualitative Study. *Frontiers in Psychology*, 10, 1034. <https://doi.org/10.3389/fpsyg.2019.01034>
- Greil, S., & Kiesow, S. (2014). Tax Compliance. *Wirtschaftswissenschaftliches Studium*, 43(5), 270–273. https://doi.org/10.15358/0340-1650_2014_5_270
- Haubner, T. (2021). Auswirkung von Tax-Compliance-Management-Systemen auf die Verfolgung wegen Steuerstraftaten und Steuerordnungswidrigkeiten. *Wirtschaftsstrafrecht Und Haftung Im Unternehmen*, 2021(7–08), 203–208. https://www.wiso-net.de/document/ZWH_zwh.2021.07.i.0203.01.a
- Helfferrich, C. (2011). *Die Qualität qualitativer Daten: Manual für die Durchführung qualitativer Interviews*. VS Verlag für Sozialwissenschaften. <https://doi.org/10.1007/978-3-531-92076-4>
- Hölzemann, S., Ramadan, F., Otto, T., & Nordmann, N. (2023). Tax-CMS als Game-Changer in steuerlichen Außenprüfungen? *Die Wirtschaftsprüfung*, 2023(24), 1394–1401.
- Hoppe, T., Schanz, D., Sturm, S., & Sureth-Sloane, C. (2023). The Tax Complexity Index – A Survey-Based Country Measure of Tax Code and Framework Complexity. *European Accounting Review*, 32(2), 239–273. <https://doi.org/10.1080/09638180.2021.1951316>
- Hoppe, T., Schanz, D., Sturm, S., Sureth-Sloane, C., & Voget, J. (2021). The Relation between Tax Complexity and Foreign Direct Investments: Evidence Across Countries. *WU International Taxation Research Paper Series No. 2020-03*. <https://doi.org/10.2139/ssrn.3526177>
- IDW. (2017). IDW Praxishinweis: Ausgestaltung und Prüfung eines Tax Compliance Management Systems gemäß IDW PS 980 (IDW Praxishinweis 1/2016). *IDW Life*, 7/2017.
- IDW. (2021). Entwurf einer Neufassung des IDW Prüfungsstandards: Grundsätze ordnungsmäßiger Prüfung von Compliance Management Systemen (IDW EPS 980 n.F. (10.2021)). *IDW Verlag GmbH*.
- Inasius, F., Darijanto, G., Gani, E., & Soepriyanto, G. (2020). Tax Compliance After the Implementation of Tax Amnesty in Indonesia. *SAGE Open*, 10(4), 1–10. <https://doi.org/10.1177/2158244020968793>
- Kaiser, R. (2021). *Qualitative Experteninterviews: Konzeptionelle Grundlagen und praktische Durchführung* (2. Auflage). Springer VS. <https://doi.org/10.1007/978-3-658-30255-9>
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced Versus Voluntary Tax Compliance: The “Slippery Slope” Framework. *Journal of Economic Psychology*, 29(2), 210–225. <https://doi.org/10.1016/j.joep.2007.05.004>

- Kirsch, A. (2020). Steuerliche Außenprüfung: Update: Tax Compliance Management System in der Betriebsprüfung. *DER BETRIEB, Beilage 03*, 2020(22), 7–11. https://www.wiso-net.de/document/MCDB__DBDBDB1331101
- Kowallik, A. (2022a). Bayern startet ein Pilotprogramm zum Tax CMS in der Außenprüfung. *DER BETRIEB*, 20, 1231–1232. https://www.wiso-net.de/document/MCDB__DB1402362
- Kowallik, A. (2022b). Bp-Prüfungserleichterungen bei einem wirksamen Tax CMS ab 01.01.2023. *DER BETRIEB*, 42, 2445–2446. https://www.wiso-net.de/document/MCDB__DB1419461
- Ludwig, S., Stender, C., Stauder, M., & Eilers, H. (2021). Tax Compliance Management-System: Mehr Rechtssicherheit für Unternehmen und Verantwortungsträger. *KPMG*. Abrufbar unter: <https://assets.kpmg/content/dam/kpmg/de/pdf/Themen/2020/01/Tax%20Compliance%20Management%20System.pdf> [zuletzt abgerufen am: 17.04.2023].
- Mardhiah, M., Miranti, R., & Tanton, R. (2019). The Slippery Slope Framework: Extending the Analysis by Investigating Factors Affecting Trust and Power. *CESifo Working Papers*, 7494. <https://doi.org/10.2139/ssrn.3338850>
- Mayring, P. (1994). Qualitative Inhaltsanalyse. In A. Boehm, A. Mengel, & T. Muhr (Eds.), *Texte verstehen: Konzepte, Methoden, Werkzeuge* (Vol. 14, pp. 159–175). Universitätsverlag Konstanz.
- Mayring, P. (2016). *Einführung in die qualitative Sozialforschung: Eine Anleitung zu qualitativem Denken* (6., überarbeitete Auflage). Beltz.
- Mayring, P. (2022). *Qualitative Inhaltsanalyse: Grundlagen und Techniken* (13., überarbeitete Auflage). Beltz.
- Mendoza, J. P., Wielhouwer, J. L., & Kirchler, E. (2017). The backfiring effect of auditing on tax compliance. *Journal of Economic Psychology*, 62, 284–294. <https://doi.org/10.1016/j.joep.2017.07.007>
- Meuser, M., & Nagel, U. (2002). ExpertInneninterviews—Vielfach erprobt, wenig bedacht. In A. Bogner, B. Littig, & W. Menz (Eds.), *Das Experteninterview: Theorie, Methode, Anwendung* (pp. 71–93). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-322-93270-9_3
- Mills, L. F. (1996). Corporate Tax Compliance and Financial Reporting. *National Tax Journal*, 49(3), 421–435. <https://doi.org/10.1086/NTJ41789215>
- Mir Djawadi, B., & Fahr, R. (2013). The Impact of Tax Knowledge and Budget Spending Influence on Tax Compliance. *IZA Discussion Paper No. 7255*. <https://doi.org/10.2139/ssrn.2234277>
- OECD. (2004, October). *Compliance Risk Management: Audit Case Selection Systems*. Center for Tax Policy and Administration.

- OECD. (2013). *Co-operative Compliance: A Framework: From Enhanced Relationship to Co-operative Compliance*. OECD Publishing. <https://doi.org/10.1787/9789264200852-en>
- OECD. (2016). *Co-operative Tax Compliance: Building Better Tax Control Frameworks*. OECD Publishing. <https://doi.org/10.1787/9789264253384-en>
- Plesner Rossing, C. (2013). Tax strategy control: The case of transfer pricing tax risk management. *Management Accounting Research*, 24(2), 175–194. <https://doi.org/10.1016/j.mar.2013.04.008>
- Pull, V. (2022). Tax Compliance Management Systeme in der Praxis. *Deutsches Steuerrecht*, 42, 2132–2138. https://www.wiso-net.de/document/KUSE__6012393
- Raatz, P. (2022, June 22). *Wie ein wirksames Tax CMS etabliert werden kann*. EY. Abrufbar unter: https://www.ey.com/de_de/tax-law-magazine/tax-cms-bis-zum-ende-gedacht [zuletzt abgerufen am: 17.04.2023].
- Risse, R. (2017). Steuerliche Transparenz durch ein Tax Compliance System und die Anforderungen nach IDW PS 980. *Der Betrieb*, 36, 2061–2066. https://www.wiso-net.de/document/MCDB__5920db9db6dc7ab0720dd541654c6c7a0d08d681
- Rödl & Partner. (2023). *Prüfung von Compliance Management Systemen nach IDW PS 980*. Rödl & Partner. Abrufbar unter: <https://www.roedl.de/themen/compliance-management-gesundheitswesen/pruefung-von-compliance-management-systemen> [zuletzt abgerufen am: 17.04.2023].
- Schenkel, A. (2016). Kosten der Compliance-Regulierung: Eine empirische Untersuchung am Beispiel der deutschen Genossenschaftsbanken. *Arbeitspapiere Des Instituts Für Genossenschaftswesen Der Westfälischen Wilhelms-Universität Münster, No. 169*. Abrufbar unter: <http://hdl.handle.net/10419/146552>
- Schmeer, M. (2023). Quo vadis Tax Compliance? In M. Schmeer (Ed.), *Tax Compliance im Kontext der Betriebswirtschaftlichen Steuerlehre* (pp. 313–333). Erich Schmidt Verlag GmbH & Co. KG. <https://doi.org/10.37307/b.978-3-503-23627-5.06>
- Seer, R. (2009). Zeitnahe Außenprüfung bei Groß- und Konzernbetrieben. *Die Unternehmensbesteuerung*, 2(10), 673–679. https://www.wiso-net.de/document/KUSE__3878568
- Seer, R. (2010). Steuerliche Sachaufklärung. Der Untersuchungsgrundsatz im heutigen Besteuerungsverfahren. *Steuer Und Studium*, 8, 369–374. https://www.wiso-net.de/document/KUSE__2810997
- Slemrod, J. B. (1989). 5. Complexity, Compliance Costs, and Tax Evasion. In J. A. Roth & J. T. Scholz (Eds.), *Taxpayer Compliance: Volume 2: Social Science Perspectives: Vol. Volume 2* (pp. 156–181). University of Pennsylvania Press. <https://doi.org/10.9783/9781512806281-006>
- Slemrod, J. B. (2007). Cheating Ourselves: The Economics of Tax Evasion. *Journal of Economic Perspectives*, 21(1), 25–48. <https://doi.org/10.1257/jep.21.1.25>

- Slemrod, J. B., & Venkatesh, V. (2002). The Income Tax Compliance Cost of Large and Mid-Size Businesses. *Ross School of Business Paper, No. 914*. <https://doi.org/10.2139/ssrn.913056>
- Staufenbiel Institut. (2019). *Die größten Wirtschaftsprüfungs- und Steuerberatungsgesellschaften Deutschlands*. Staufenbiel Institut. Abrufbar unter: <https://www.staufenbiel.de/magazin/jobsuche/arbeitgeber-rankings/top-10-die-groessten-wirtschaftspruefungsunternehmen.html> [zuletzt abgerufen am: 17.04.2023].
- StMFH. (2022). *Füracker: Vertiefte Einbeziehung der Unternehmens-Compliance in die Steuerprüfung* (No. Nr. 046). Bayerisches Staatsministerium der Finanzen und für Heimat. Abrufbar unter: https://www.bayern.de/pdf/data/bayernde_85206.pdf
- Sulik-Górecka, A. (2022). Tax Compliance as an Element of the Corporate Compliance Management System. *Financial Sciences / Nauki o Finansach, 26(2)*, 44–57. <https://doi.org/10.15611/fins.2022.1.04>
- Trenn, I. (2021). *Empirical Essays on Tax Compliance Management and Tax Disclosures*. Gottfried Wilhelm Leibniz Universität Hannover.
- van der Geest, J., & Jacob, M. (2023). Tax Enforcement (De)Centralization: Tax Compliance Versus Competitiveness. *Working Paper*. <https://doi.org/10.2139/ssrn.3363684>
- Wagner, V. (2022). Die zeitnahe Betriebsprüfung—Eine Zwischenbilanz. *FinanzRundschau, 11/2022*, 496–501. https://www.wiso-net.de/document/FINR__fr.2022.11.i.0496.01.a
- Weichel, M. (2020). Kapitel 15. Tax-Compliance-Management-System. In I. Zenke, R. Schäfer, & H. Brocke (Eds.), *Corporate Governance* (pp. 473–486). De Gruyter. <https://doi.org/10.1515/9783110670493-015>
- Wunder, H. F. (2009). Tax risk management and the multinational enterprise. *Journal of International Accounting, Auditing and Taxation, 18(1)*, 14–28. <https://doi.org/10.1016/j.intaccudtax.2008.12.003>
- Wünnemann, M., Koller, B., Kowallik, A., Bogner, G., & Gegusch, D. (2019). *Steuerliche Betriebsprüfungen – Optionen für zeitgemäße Reformen: Vorschläge für schnellere, effiziente Betriebsprüfungen und für mehr Kooperation von Unternehmen und Finanzverwaltung* (No. 0088). Bundesverband der Deutschen Industrie e.V. Abrufbar unter: https://issuu.com/bdi-berlin/docs/201909_position_bdi_steuerliche_betriebspruefungen

APPENDIX

Appendix I. INTERVIEW MATERIAL

Questionnaire

Tax advisors

I. Your person

1. Please enter your age.

< 20 years

20 to 30 years

31 to 40 years

41 to 50 years

51 to 60 years

> 60 years

2. Please enter your gender.

Male

Female

diverse

3. Please state the name of the department in which you work.

4. Please state your core area of work.

5. What position do you hold? (e.g. Associate, Manager, Partner)

6. How many years of professional experience in tax do you have in total?

7. How would you rate your previous experience in dealing with tax audits?

inexperienced

very experienced

8. Do you have training or work experience at the tax office?

Yes

no

II. Client structure /firm structure

9. Tax advisors: In which business are your clients mainly active?

Firm: In which trade is your firm mainly active?

Agriculture and forestry

Mining

Manufacturing industry

Energy supply

Water supply

Building trade

Trade

Transport and warehousing

Provision of financial and insurance services

Provision of other business services

Provision of freelance, scientific and technical services

Real estate and housing

Education and teaching

Health and social services

Art, entertainment and relaxation

Provision of other services

Private households with domestic staff

Hospitality industry

Information and communication

Public administration, defense, social security

Extra-territorial organization and corporate bodies

Other:

10. Tax advisors: To which legal form can your clients be predominantly assigned?
(multiple selection possible)

Firm: What legal form does your firm take

Sole proprietorship

Partnership

Corporation

11. Tax advisors: To which size category according to the German Commercial Code (HGB) can your clients mainly be assigned? (multiple choice possible)*

Firm: Which size category according to HGB does your firm belong to?

- Smallest
- Small

- Medium
- Large

*** Info: The allocation to a size class within the meaning of Sections 267, 267a HGB is made if at least two of the three characteristics of a class are fulfilled.**

	<i>Balance sheet total (in EUR million)</i>	<i>Sales revenue (in EUR million)</i>	<i>Number of employees</i>
<i>Smallest</i>	< 0.35	< 0.7	< 10
<i>Small</i>	0.35 to 6	0.7 to 12	10 to 50
<i>Medium</i>	6 to 20	12 to 40	50 to 250
<i>Large</i>	> 20	> 40	> 250

Interview questionnaire

The interview questionnaire is shown below. How these questions were put to the firms and **tax advisors** is colour-coded accordingly.

Interview Start

"Firstly, I would like to thank you once again for your time and willingness to support my work in this interview. In the following, I would like to start with the first block of questions, which contains general questions about Tax CMS and the use of these systems by your clients."

I. Question block: Tax CMS

1. **Tax advisors:** What percentage of your clients use Tax CMS?
 - 1.1. Possible follow-up question:
What differences are there in this respect between different size classes?
1. **Firms:** Does your firm use a Tax CMS?
 - 1.1. If so, when did you introduce it?
 - 1.2. If so, what types of tax does this cover?
2. What was the primary motivation for **your clients/your firm to introduce a** Tax CMS? (*Please name the three most important reasons*)
 - For example: Managing risks, improving cooperation with the tax office
3. **Tax advisors:** How high do you estimate the proportion of firms that have certification for their Tax CMS?
 - 3.1. Possible follow-up question:
What differences are there in this respect between different size classes?
3. **Firms:** Is your firm certified for the Tax CMS?
4. **Tax advisors:** Are you aware of any cases where tax auditors have explicitly included Tax CMS certification in their audit?
 - 4.1. Possible follow-up question:
What changes did you notice during the audit of these firms?
4. **Firms:** Has this certification of the Tax CMS already been explicitly included in the tax audit by a tax auditor?

"The next block of questions contains questions that explicitly deal with the influence of Tax CMS on the process of German tax audits. You have already received a short information text on this in advance. The core message of this text is that the draft law for the implementation of the "DAC 7" directive provides for explicit consideration of Tax CMS in tax audits. In future, this is to be accompanied by audit simplifications for taxpayers. Even before this law comes into force, it is already possible to take such Tax CMS into account in tax audits through the extension of Section 153 AO."

II. Block of questions: Influence of Tax CMS on tax audits

5. **Tax advisors:** How was Tax CMS taken into account in the tax audits you are familiar with - before the implementation of the "DAC 7" guidelines?
5. **Firms:** How has your firm's Tax CMS been taken into account in tax audits to date - prior to the implementation of the "DAC 7" guidelines?
6. **Tax advisors:** If a firm has implemented a Tax CMS, you have been able to make changes in the following areas compared to firms without such a system:
 - Exam duration,
 - Scope of the audit (e.g. number of enquiries/requested documents, workload in the firm),
 - Audit focus,
 - Number of tax disputes,
 - How high are the back tax payments?
6. **Firms:** If you compare tax audits that were carried out before the introduction of the Tax CMS in your firm with those that were carried out after the introduction of the Tax CMS in your firm, have you seen any changes in the following areas?
 - Exam duration,
 - Scope of the audit (e.g. number of enquiries/requested documents, workload in the firm),
 - Audit focus,
 - Number of tax disputes,
 - Amount of back tax payments perceive?
7. What opportunities do you see for **your** firm from the increasing consideration of Tax CMS in tax audits?
8. In your opinion, what risks arise for **your** firm from the increasing consideration of Tax CMS in tax audits?

III. Question block: Compliance costs, open questions & further comments

9. Do you expect the implementation of a Tax CMS to result in lower compliance costs for **your** firm in the future?
10. Where do you see potential for improvement in **already implemented Tax CMS/your implemented Tax CMS?**
11. What changes would you like to see on the part of **firms and** tax authorities with regard to Tax CMS?
 - For example: More consideration, more far-reaching relief for firms, more specific guidance on the organization by the tax authorities
12. Do you have any further comments regarding the influence of Tax CMS on tax audits?

IV. Question block: Additional optional questions

13. **Tax advisors:** Do tax auditors in firms with Tax CMS tend to focus on the areas with or without Tax CMS?
14. **Tax advisors:** Do you notice differences in the scope of audits in the other areas without Tax CMS?

Interview end

"Thank you very much for your time and your willingness to participate in my interview study"

Appendix II. DESCRIPTIVE INFORMATION

Table 5: Further descriptive information from the interviewees

	N = 27	%
Age		
20 to 30	2	7%
31 to 40	4	15%
41 to 50	12	44%
51 to 60	9	33%
Department		
Tax	8	22%
Corporate Tax	10	28%
Tax Reporting & Strategy	4	11%
Governance & Risk Management	3	8%
Tax & Legal	2	6%
Taxes & Duties	2	6%
Tax Technology Consulting	1	3%
Function Tax	1	3%
Group Tax	1	3%
Tax policy department	1	3%
Transfer pricing	1	3%
International Tax	1	3%
Foreign Trade	1	3%
Core work area		
Tax CMS	8	18%
Tax	6	13%
Tax process consulting	5	11%
Corporate Tax	5	11%
Tax Accounting	4	9%
Tax Technology	3	7%
Tax Audits	3	7%
Inbound Tax	2	4%
Transfer prices	2	4%
Digital Transformation of Tax Function	1	2%
Tax Compliance	1	2%
Tax Function Effectiveness	1	2%
Tax Litigation & Controversy	1	2%
Value added tax	1	2%
Restructuring	1	2%
Risk Management	1	2%

Note: The table shows further descriptive information from the interview participants surveyed. The number of answers for the variables department and core area of work differ from the number of interviewees, as several answers are possible here. Answers with the same content but different designations are summarized.

Appendix III. STRUCTURED CONTENT ANALYSIS

Table 6: Transcription rules

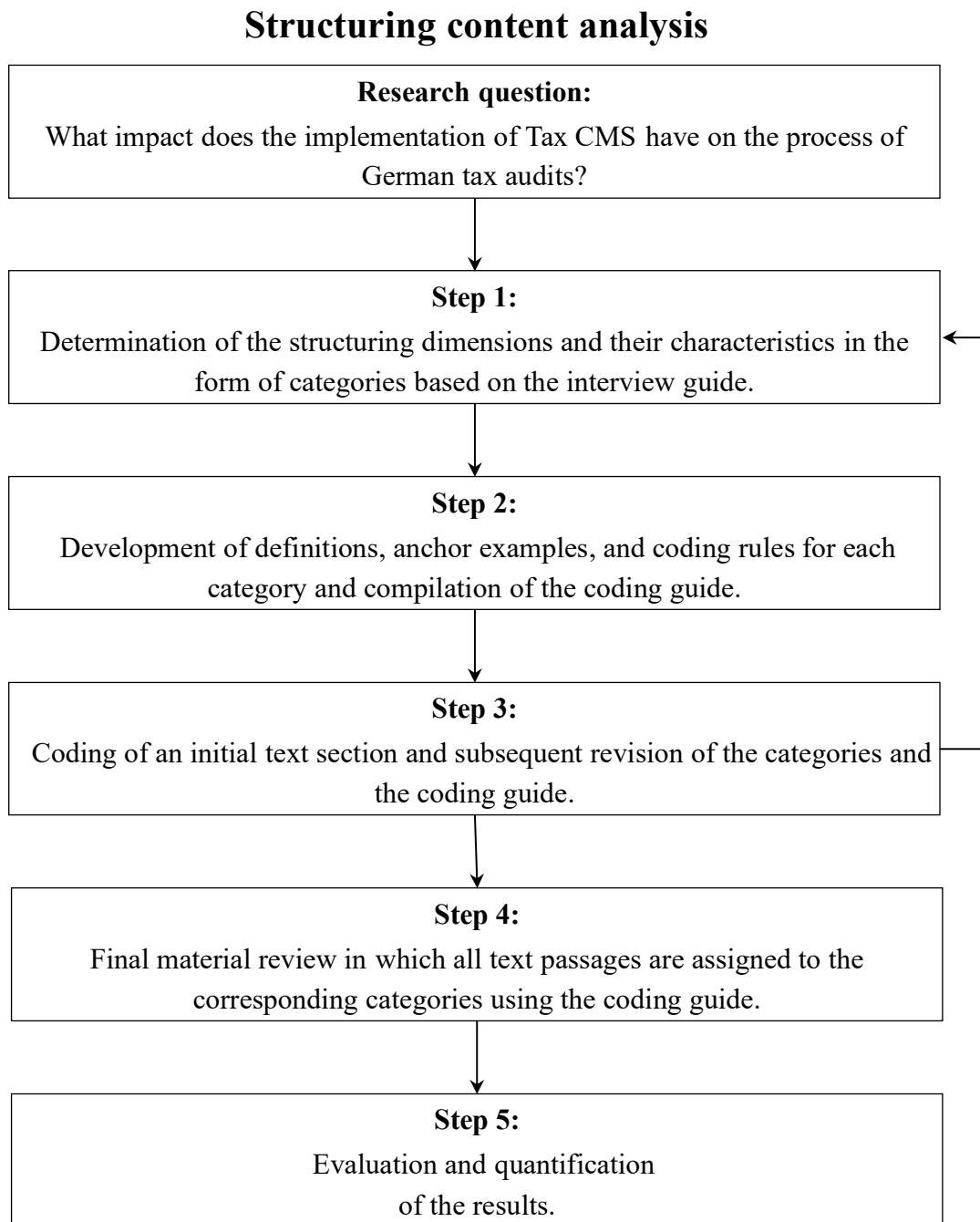
Transcription rules

1. It is transcribed verbatim and not phonetically or summarized.
 2. Word slurs (e.g. "n Tax CMS") are approximated to written German ("ein Tax CMS) and syntactical errors are retained in the sentence.
 3. Dialects are translated word for word into High German.
 4. Colloquial particles are transcribed (e.g. "gell, ne, ...").
 5. Word and sentence breaks are marked with "/" and word duplications are transcribed.
 6. Punctuation is smoothed out in favor of readability. If the voice is lowered briefly or the emphasis is not clear, a full stop is used rather than a comma.
 7. Reception signals and filler sounds of all persons ("hm, ja, aha, ähm" etc.) are transcribed. Exception: Back channeling by the interviewer while another person is speaking is not transcribed as long as the flow of speech is not interrupted.
 8. Pauses of approx. 3 seconds or more are marked by (...).
 9. Each speaker's contribution has its own paragraphs. There is a free, empty line between the speakers. Short interjections are also transcribed in a separate paragraph. Timestamps are inserted at the end of a paragraph.
 10. Each line is numbered.
-

Source: Own illustration, based on Dresing and Pehl (2018, pp. 20–25).

Note: The table shows the transcription rules used to transcribe the recorded interviews.

Figure 10: Sequence of the structuring content analysis



Source: Own illustration, based on Mayring (1994, 2016, 2022).

Note: The diagram shows the structuring content analysis procedure applied to the transcribed interviews. In the first step, the transcription material is formally structured on the basis of its internal structure, and possible characteristics are formulated. The structural dimensions defined for this purpose are recorded with their characteristics in categories, which are assigned to the questions of the interview guide. In the second step, the categories and their characteristics are defined, anchor examples for clear decisions on characteristics are adopted, and coding rules for decisions in borderline cases are drawn up. These two steps create the coding guide for qualitative content analysis. Next, a text section is coded, and the categories and the coding guide are revised. This is followed by the final material review, in which all text passages are assigned to the corresponding categories. Once the transcripts have been fully coded, the results are analyzed and quantified in section 4.

Appendix IV. ANALYSIS OF THE INTERVIEW QUESTIONS

Table 7: Size class differences of Tax CMS implementation

	Tax advisors n = 14	%
Size class differences general implementation	9	43%
The bigger the more	9	43%
Size class differences implementation detail	8	38%
DAX 40 almost all	2	10%
Listed firms more than half	2	10%
Listed firms more likely	1	5%
Unlisted less than half	1	5%
Medium-sized firms less than half	2	10%
No size class differences implementation	2	10%
No size class differences	2	10%
n.a.	2	10%

Note: The table shows the results for interview question 1.1, which asks whether tax advisors can recognize size class differences in the use of Tax CMS. The partial results may deviate from the sum of the items contained therein due to rounding to whole numbers.

Table 8: Size class differences of Tax CMS certification

	Tax advisors n = 14	%
Size class differences certification	11	79%
The bigger the sooner	5	36%
The larger the more likely, irrelevant for SMEs	5	36%
The larger the more likely, highly regulated firms more	1	7%
No size class differences certification	1	7%
No size class differences	1	7%
n.a.	2	14%

Note: The table shows the answers to interview question 3.1 on whether tax advisors can identify differences in the proportion of certified Tax CMS by size.

Table 9: Inclusion of Tax CMS certification in tax audits

	N = 21	%
Query certification in tax audit	3	14%
No query and inclusion of certification in tax audit	15	71%
n.a.	3	14%

Note: The table indicates whether the tax advisors are aware of cases in which the certification of the Tax CMS was included in the tax audit and thus shows the results of interview question 4.

Table 10: t-test - Proportion of clients using Tax CMS

t-test: Two-Sample Assuming Unequal Variances

Share of Tax CMS implementation

	<i>medium, large</i>	<i>Large</i>
Mean	0,55	0,61428571
Variance	0,055	0,11059524
Observations	5	7
Hypothesised Mean Difference	0	
df	10	
t Stat	-0,3926925	
P(T<=t) one-tail	0,35139351	
t Critical one-tail	1,81246112	

Note: The client-related size class differences shown in

Figure 1 between the perception of the proportion of use of Tax CMS by tax advisors who advise large and medium-sized as well as large firms are tested for significance. Due to the large differences in the variances of the corresponding variables, a t-test is performed under the assumption of unequal variances. As it is expected that the proportion of Tax CMS used and the proportion of certifications also decreases with decreasing firm size, the results of the one-sided t-tests are considered. df specifies the degrees of freedom for determining the critical values from the t-distribution. No significant difference can be determined for the use of Tax CMS.

Table 11: t-test - Proportion of Tax CMS certification of clients

t-test: Two-Sample Assuming Unequal Variances

Share of Tax CMS certification

	<i>medium, large</i>	<i>Large</i>
Mean	0,135	0,38714286
Variance	0,007375	0,14099048
Observations	5	7
Hypothesised Mean Difference	0	
df	7	
t Stat	-1,71496008	
P(T<=t) one-tail	0,065033819	
t Critical one-tail	1,894578605	

Note: The client-related size class differences shown in

Figure 1 between the perception of the certification share of Tax CMS by tax advisors who advise large and medium-sized as well as large firms are tested for significance. Due to the large differences in the variances of the corresponding variables, a t-test is performed under the assumption of unequal variances. As it is expected that the proportion of Tax CMS used and the proportion of certifications also decreases with decreasing firm size, the results of the one-sided t-tests are considered. df indicates the degrees of freedom for determining the critical values from the t-distribution. However, the difference in the proportion of certification is significant at a 10% level.

Impressum:

Arbeitskreis Quantitative Steuerlehre, arqus, e.V.

Vorstand: Prof. Dr. Ralf Maiterth (Vorsitzender),
Prof. Dr. Kay Blaufus, Prof. Dr. Dr. Andreas Löffler
Sitz des Vereins: Berlin

Herausgeber: Kay Blaufus, Jochen Hundsdoerfer,
Martin Jacob, Dirk Kieseewetter, Rolf J. König,
Lutz Kruschwitz, Andreas Löffler, Ralf Maiterth,
Heiko Müller, Jens Müller, Rainer Niemann,
Deborah Schanz, Sebastian Schanz, Caren Sureth-
Sloane, Corinna Treisch

Kontaktadresse:

Prof. Dr. Dr. h.c. Dr. h.c. Caren Sureth-Sloane,
Universität Paderborn, Fakultät für
Wirtschaftswissenschaften,
Warburger Str. 100, 33098 Paderborn,
www.arqus.info, Email: info@arqus.info

ISSN 1861-8944