CORPORATE GOVERNANCE OF GERMAN GROWTH COMPANIES. EMPIRICAL ANALYSIS OF THE CORPORATE GOVERNANCE QUALITY AND THE STRUCTURE OF SUPERVISORY BOARDS OF COMPANIES LISTED ON TEC-DAX

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Abstract

This article analyses the importance of corporate governance for growth companies, derives specific requirements for them and evaluates the corporate governance quality for companies listed on Tec-Dax. Growth companies' characteristics imply a comparatively high importance of corporate governance due to a high level of business and agency risk. Several corporate governance elements are therefore particularly important for growth companies. Overall, the empirical results imply a high conformity of the Tec-Dax companies with the GCGC criteria with some exceptions for specific companies and criteria. But the analysis of the quality of their supervisory boards delivers a differentiated result as in some of the analysed companies the effectiveness of the supervisory board is questionable.

Keywords: corporate governance, supervisory board, TEC-DAX

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Introduction

Although corporate governance is of particular importance for growth companies and therefore, also of interest for their investors, most governance research is focused on large and mature organisations (Markman et al. 2001:278; Van den Berghe/Levrau 2002: 125)[1]. In order to foster the progress of knowledge on this topic, this article is aimed at presenting the findings of previous research and new empirical results from Germany. Therefore, the article analyses the particular importance of corporate governance for growth companies and defines specific requirements for the implementation of effective corporate governance in these companies. Furthermore, the implementation of good corporate governance among German growth companies is evaluated. Due to the limited knowledge on the corporate governance of growth companies the article is of an explorative nature.

After this introduction, the theory and existing literature on the corporate governance of growth companies is analysed. First, the comparatively high importance of corporate governance for these companies is explained. It is caused by a high level of business and agency risk, which increases the likelihood of opportunistic behaviour of the managers and the severity of the consequences of wrong decisions alike. From the characteristics of growth companies specific requirements for their corporate governance are derived. These (requirements) enable the realisation of the growth potential and diminish the risk of agency problems. In the next paragraph the corporate governance quality of German growth companies is analysed empirically taking the criteria of the German Corporate Governance Code (GCGC) as a measure. After this broad perspective, the quality of the supervisory boards is analysed in detail since they represent a core element of corporate governance. In the conclusion the main findings are summarised and discussed.

Importance of Corporate Governance in Growth Companies

The importance of corporate governance is dependent on the probability of both uncertainty and opportunism (Williamson 1975: 20). Thus, the importance of good corporate governance depends on one hand, on the level of business risk that determines uncertainty as well as the likelihood of opportunism and

[1] For an overview of literature on governance of growth companies see Dailey at al. 2002.

on the other hand, on the level of agency risk that determines the possibility of opportunism. (Barney et al. 1989: 64; Van den Berghe/Levrau 2002: 125) Due to their specific characteristics[2] growth companies possess a relatively high level of business risk as well as agency risk. On this basis, specific requirements for corporate governance in growth companies are derived.

Corporate Governance

Corporate Governance is the framework of management and control of a company. (Grundsatzkommission Corporate Governance 2000: 1; Bassen 2002: 20)

Bases are principal-agent-problems between the owner and the manager of a company. They occur because of diverging interests: whereas the owner has the value maximisation of the company as a target, the manager also has personal interest that may interfere with the former. (Jensen/Meckling 1976: 308 ff.) When the agent takes decisions that are inconsistent with the interests of the owners then he is acting opportunistically. (Frederiksen/Klofsten 2001: 204) Opportunistic behaviour is enforced by asymmetric information because the principal cannot recognise the quality of the agents' actions. (Smith/Watts 1992: 275)

Opportunistic behaviour of the managers can cause four generic problems for investors:

- Managers are not working hard to maximize value
- Managers know more about their quality and capabilities than the investors
- Situations in which investors and managers disagree

Important managers could hold-up the investors by threatening to leave the company (Kaplan/ Strömberg 2004: 2177-2178)

Effective corporate governance can reduce these problems that are particularly severe in growth companies as explained in the next paragraphs. Many of their characteristics increase the likelihood of opportunistic behaviour, even the unity of ownership and management.

High Business Risk

Business risk is determined by the probability of survival of a business, which is predominantly determined by its profitability. Therefore, the level of business risk is a function of the uncertainty of profitability, which again is determined by the return on investment (Barney et al. 1989: 64; Porter 2004: 5 ff.). In particular, the following three characteristics of growth companies imply a comparatively high level of business risk. Growth companies normally operate in highly dynamic environments. To succeed in these industries and to realise high growth, constant change is required, which leads to a high degree of internal dynamic. They are often exploring markets where competitive equilibriums among buyers, suppliers, potential entrants, current competitors, and product/service substitutes have not been established (Porter 2004: 215 ff.; Fiet 1995: 555; Küting 2000a: 597). Growth companies normally cannot take advantage of a high profile in the market, which makes them more vulnerable. Additionally, they typically are built on the challenging assessment and government of innovation, which has become even more difficult during the last decades as information technologies and the globalization of industries have blurred industry confines and severed competition. (Prahalad/Hamel 1994: 5 ff)

As the environment of growth companies is so dynamic and their markets are highly competitive, they are required to respond quickly to changing conditions in order to succeed. For this a great extent of flexibility is important, which leads to a high degree of internal dynamic. (McGuire, 2000: 33). The internal processes undergo constant change rather than being firmly established, which increases the risk. (Auge-Dickhut et al. 2000: 4.3.2.1)

Growth companies are highly dependent on their managers. Their management consists in many cases of the founders that still own parts of the company. (Bessler et al. 2001: 254; He/Conyon 2004: 53 ff.) They have specific and unique knowledge about the companies' opportunities and assets as well as the capabilities to exploit them. (Kirzner 1997: 67ff.) Moreover, they possess information about the day-to-day business and the future prospects (Markman et al. 2001: 275). That means that the success of the business is highly dependent on the entrepreneurs or managers and their personal knowledge and experience, which can have four negative consequences: First, the management of growth companies make great demands on the capabilities of the managers. The team is often small and its experiences are limited, but there are always more problems than the managers can handle at any given time. (Fredriksen/Klofsten 2001: 203) Thus, the quality of the managers constitutes an important risk factor for the success of the company. Second, there might be negative consequences if the managers leave the company as they take key knowledge and experiences with them and leave the company without leadership as the organisation is in many cases centred around them. Third, the possibility of opportunistic behaviour is very high, as the managers possess information that the owners lack. (Shane/Cable 2002: 365) They can make use of this information and act against the interest of the outside owners. Finally, the likelihood of opportunism is increased as the managers mainly make the decisions and might be more risk averse than the owners of a company. (Coffee 1987: 18; Jensen/Meckling 1976: 349) This is because managers invest most of their non-

[2] Growth companies are characterised by the exploitation of new opportunities, high capital requirements, scarce resources, a high degree of intangible assets, a short history, a high dependence on the managers, a high internal and external dynamic and low diversification. (Küting 2002a, Küting 2002b, Hayn 1998)

diversifiable and non-tradable capital in the growth firms, whereas the owners can more easily diversify risk by investing parts of their wealth in different companies. (Markman et al. 2001: 280) So managers might be reluctant to invest in risky but cash flow positive projects. But this risk-averse decision-making might lead to lower returns for the owners. (Gomez-Mejia et al. 2000: 9). Growth companies generally have a low level of diversification as they only operate in a small number of business areas, producing and offering few product lines. (Küting 2000a: 600 f.) In high technology firms, new products for example count for more than 50 % of their annual sales. (Schilling/Hill 1998: 67 ff.) This increases the business risk of a company, as its survival is dependent on only a few products. (Küting 2000a: 600 f.). A highly dynamic environment, dependence on the managers, and little diversification are three important factors that cause a high level of business risk. And this business risk enforces the importance of corporate governance not only because of severe consequences of poorer decision making by the managers, but also because of an increased likelihood of opportunistic behaviour by the managers. The next chapter will analyse the high level of agency risk, which facilitates opportunistic behaviour due to asymmetric information between the owners and the managers.

High Agency Risk

Agency risk concerns the probability that managers will make decisions that do not maximise the wealth of the investors. (Jensen/Meckling, 1976: 308f.) Growth companies are built on special opportunities. The entrepreneurs or the management of growth companies must recognise and capitalise on opportunities that others cannot yet see in order to gain high growth (Shane 2000: 448). The very characteristics of growth companies cause their relatively high level of agency risk. More specifically, the following four characteristics of growth companies determine the associated agency risk. The business of growth companies stands out because of its high specificity. As innovation increases, the complexity also increases. This demands higher information processing capabilities, which increases the agency problems (Markman 2001: 289). Owners of companies that lack such high information processing capabilities might not be able to fully understand the business, its associated risks and the information on its development. Additionally, the management is reluctant to fully disclose specific information in order to prevent others from pursuing opportunities the company is building on. (Shane/Cable 2002: 365) This makes it even more difficult to closely follow and control the development of a growth company and thereby facilitates opportunistic behaviour by the managers who possess the specific knowledge.

A comparatively great part of the companies' assets are intangible or difficult to quantify such as patents, rights and specific know-how. (Küting 2000b: 674) But a high importance of immaterial assets makes control of the management even more difficult as their existence, value and development is difficult to judge. This increases the possibility of intentional misinformation of the owners by the managers. (Gompers/Lerner 2001: 155)

Due to their short history, growth companies lack a track record and a high profile. (Hayn 1998: 15) That means little information is available about the previous development of a business, making it hard for outside owners to evaluate it. Moreover, without historic information, managers can more easily present a false picture of the business. (Smith/Smith 2000: 399; Achleitner/Bassen 2002: 1194). The characteristic of managerial ownership of growth companies can strengthen or weaken the associated agency risk. There are two different hypotheses – both empirically supported – that predict either positive or negative consequences of a partial ownership of the management.

According to the convergence of interest hypothesis, management ownership should increase a company's value by aligning the interests of owners and managers. (Morck et al. 1988: 294) As the managers are also owners of the company, they should target value maximisation of the company just as the other owners do. Supporting this hypothesis, the likelihood of opportunistic behaviour, especially consumption on the job, increases with the amount of outside equity. (Jensen/Meckling 1976: 346) This shows that the managers have incentives to maximise the firm value when they own a part of the company. In contrast to this, the entrenchment hypothesis predicts that managers with a substantial share in the company can have negative effects on the value of the firm for the owners. By means of influence and voting rights, they can guarantee their employment at attractive conditions rather than increase the value of the company. (Morck et al. 1988: 294) According to this hypothesis, managers prefer to increase their living standards by taking advantage of their employment rather than by increasing the value of their shares of the company. Baker and Gompers (1999) present an overview of different consequences of managerial ownership of the company: The managers might be immune to career concerns (Fama 1980: 288 ff.; Holstrom 1999: 169 ff.), the discipline of the product market (Hart 1983: 366 ff.), monitoring by large shareholders (Shleifer/Vishny 1986: 461 ff.), and value enhancing takeovers (Jensen/Ruback 1983: 5 ff.; Franks/Mayer 1990: 189 ff.). This hypothesis is corroborated by analysing the relationship between the firm value and the managerial voting power that is related to their ownership. It can be shown that the firm value is positively related to voting power if this is small, but negatively related to voting power if it becomes large. (Stulz 1987: 32 f.) Empirically it is shown for large firms that a management ownership has a positive effect on the firm value if the stake is smaller than 5 %; it has a negative effect if the stake is be-

tween 5 and 25 % and the effect becomes positive again for stakes over 25 %. This supports the entrenchment hypothesis for stakes between 5 and 25 % as such an ownership level is associated, among others, with increased voting power and dominance of inside directors. (Morck et al. 1988: 300 f.). The specificity of the business, the importance of immaterial assets, the companies' short history and the managerial ownership all cause a high level of agency risk that enforces the possibilities of the managers to act opportunistically. Together with the consequences of the high level of business risk, this explains the great importance of effective corporate governance for growth companies. In the next chapter specific requirements for growth companies are derived.

Specific Requirements

Taking the particular characteristics of growth companies into account, there are specific requirements ~~to~~ for their corporate governance. They concern four specific elements that have a higher importance for these companies compared to the more traditional companies at which most of the recommendations – such as the different national and international corporate governance codes – are targeted. But this does not imply that other corporate governance elements are of minor importance for growth companies.

Figure 1 about here

Effective control by the supervisory board is of utmost importance for growth companies. It constitutes an important and formal mechanism for monitoring top managers. (Fama 1980: 294) Furthermore, it has a consulting function, which is especially important in the case of growth companies where human resources are scarce and the experience of managers limited. (Rössler 2001: 221 f.; Küting 2000a: 597) In order to fulfil these functions effectively, two basic requirements apart from the required effort have to be accomplished: independence and qualification of the supervisory board members. The effort needed for effective monitoring and consulting of the management in growth companies is comparatively high as the work is very demanding. Because of this, it is advised to limit the number of offices of the board members. Four or five offices seem to be a reasonable number for members. (Van den Berghe/Levrau, 2002: 131).

Given the ownership and voting rights of the managers, they might also decide on members of the supervisory board. But effective control requires critical monitoring of the managers, which might not be assured if family members or friends of the managers take over this function. (Grundei/Talaulicar 2003: 194) But also former management board members and representatives of the parent company might not be able to independently monitor and consult the managers. (Du Plessis 2004: 1149)

Moreover, the supervisory board must have comprehensive qualifications in order to be able to monitor and consult the management board. (Markman et al. 2001: 286) Dynamic growth companies cannot be effectively controlled with easily quantified performance objectives but instead require greater knowledge and judgement. (McGuire 2000: 33) Because of the high likelihood and possibility of opportunistic behaviour, the supervisory board also needs experience in controlling managers. Therefore three key qualifications are needed in a company's supervisory board: professionalism, leadership, and control competence. Because of this high importance of qualified supervisory board members, research from countries with a one-tier-system propose a greater number of inside board members as more suitable for growth companies. They possess an in-depth knowledge of the firms' capabilities and its environment that is very valuable for the effective control function. (McGuire 2000: 35; Morck et al. 1998: 307; Baysinger/Hoskisson 1990: 76 f.) Members of German supervisory boards are outsiders on the contrary.

Adequate incentives for managers may contribute to the convergence of interests between the managers and outside owners and thereby contribute to a positive business development. There are two reasons for the particular importance of suitable incentive structures for the members of the management board. First, the fixed salary as well as the cash granted is recommended to be adequate to the companies' financial resources. As growth companies – especially young ones – often have liquidity as a bottleneck because of their scarce resources and high capital needs, too high fixed cash salaries might worsen the companies' financial situation. (Küting 2000a: 597). A more contingent compensation of the management would increase the business risk of the company. (Kaplan/Strömberg 2004: 2203) Second, incentives for the managers can contribute to the exploitation of the growth potential, which often requires a longer time perspective. Therefore, a stronger emphasis on longer-term incentives could foster the investment in longer-term projects and give managers the flexibility required to exploit such projects. (McGuire 2000: 34) A higher level of long-term pay in the mix of total compensation is said to overcome some of the problems arising from the divergence of interests. (Markman et al. 2001: 281)

In order to decrease the business risk that arises from the very characteristics of growth companies, an effective risk management is of highest importance. The particular risk factors of businesses have to be identified and appropriate ways to measure and track them have to be developed. Because of the high importance of immaterial assets and the great internal and external dynamic, the evaluation of the risk is a difficult task. The continuous monitoring requires effective systems for early detection of threats for the business. (Töpfer 2005: 218; Schneider 2001: 197). Given the high business risk and the high agency risk of the growth companies a high level of transparency is required, both internally in regard to

the supervisory board and other members of the company, as well as externally in regard to investors and other stakeholders. On one hand, extensive and detailed information on the development of the company and its markets is important for the stakeholders in order to judge the associated business risk. Given the specificity of the businesses, detailed explanations are often required for their-understanding. Especially the members of the supervisory board depend on a high level of transparency in order to fulfil their control function effectively. (Baysinger/Hoskisson 1990: 77). On the other hand, an open information policy can send a positive signal to the outside owners and potential investors by reducing the information asymmetries. Better information signals that the managers are acting openly and refraining from opportunistic behaviour. This might increase the attractiveness for investors and thereby the chances of the companies to obtain further financing, which is crucial for the exploitation of their growth potentials. (Kurzich/Rautenstrauch 2004: 85 f.). From the characteristics of growth companies effective control by the supervisory board, incentives for the managers, effective risk management, and high transparency have been derived as key corporate governance elements. Particular attention should be paid to their implementation.

Empirical Analysis of the Corporate Governance Quality

In this chapter the corporate governance quality of German growth companies is analysed empirically. Given the high importance of corporate governance for these companies, their ideally high commitment is expected to be reflected in a good corporate governance quality, especially in regard to the four elements that were identified as particularly important. The analysis is done on the basis of the GCGC that is introduced first. Then the conformity with the criteria of this code is analysed in two ways: the level of conformity for single companies is determined as well as critical criteria for all companies. Finally, the quality of the growth companies' supervisory boards is analysed in detail because of their particular importance. The chapter closes with a discussion of the results.

Corporate Governance Code as Instrument

The GCGC is the main instrument for the implementation and evaluation of the corporate governance quality of public German companies. It is aimed at enabling the companies and the capital market alike to implement good corporate governance. In this paragraph its development and elements are introduced. The first internationally accepted standards for good corporate governance are the OECD Principles of Corporate Governance that were published in 1999 and revised in 2004. They describe shareholder rights, equal treatment, disclosure, and transparency. (OECD 1999: 16) Being the basis for other guidelines, national distinctions such as different financial and juridical systems require national adaptations. (Hopt 1999: 901 f.)

For Germany the GCGC[3] is the authoritative instrument. Its first version was published in February 2002 by the corresponding government commission. The objective of the code is to enhance the transparency of the German corporate governance structure for national and international investors, and to set standards for good corporate governance. (Government Commission German Corporate Governance Code 2003: 1)

The GCGC covers six chapters and criteria with different levels of binding character: existing law, shall-recommendations, and should-suggestions. Companies can deviate from the shall-recommendations and should-suggestions. In the case of shall-recommendations, companies are legally required to follow the comply-or-explain principle, (§ 161 Stock Corporation Law) meaning the management and supervisory board must disclose deviations yearly. In the case of deviations from should-suggestions, disclosure is voluntary. So the GCGC is not a law but a flexible framework that follows the idea of a responsible organization, which uses the code in a flexible manner for transparent management and control. (Cromme 2003: 139 ff.) Until now the code has been adapted twice: in November 2002 and in May 2003.

The six chapters of the GCGC can be grouped under the following three headings:

Management: This comprises the chapters "Co-operation between the Management Board and Supervisory Board" and "Management Board" and includes criteria that are related to the structure, the incentives and the tasks of the managers. On one hand, criteria concern the supply of information to the supervisory board so that it can effectively control the company. On the other hand, criteria ask for incentives for the management that are aligned to the success of the company. Further criteria concern, for example, the independence of the managers and the publication of a corporate governance report.

Internal Control: The chapter "Management Board" comprises four topics that are grouped under this heading. First, the structure of the supervisory board is a key element. Qualification, independence and continuity should be considered when members are selected. Moreover, the supervisory board should possess comprehensive control and decision rights,

[3] After two different initiatives created guidelines for good corporate governance in Germany, namely the German Panel on Corporate Governance and the Berlin Initiative Group, the federal Government established the German Government Commission on Corporate Governance in 2000. This commission proposed a reform of the German corporate governance system including among others the development of a GCGC. (Baums 2001: 63) This was done by the implementation of the Government Commission of the German Corporate Governance Code that comprised in the majority by managers that were complemented by academics and capital market participants.

for example when it comes to the appointment and the compensation of the managers. The third element is a goal-oriented compensation of the supervisory board members. Finally, the efficiency of the supervisory board should be assured by a good information basis and the implementation of commissions.

External Control: The chapters "Shareholders and the General Meeting", "Transparency", and "Reporting and Audit of the Annual Financial Statements" under this heading include the following four elements: The exercise of information and decision rights by the shareholders at the general meeting should be facilitated by several criteria. A transparent information policy asks for extensive disclosure of information such as information on the shareholdings of managers and members of the supervisory board as well as for equal treatment of all shareholders. The third element concerns accounting according to the rules. Finally, the code asks for an independent annual audit. The GCGC includes many of the criteria that are relevant for growth companies. Nevertheless, the code does not cover all the important aspects or covers them only partially as some criteria are not specific enough to fully capture the described requirements.

The independence of supervisory board members is included in the criteria but it does not, for example, specify the personal relationship to members of the management board as a problem. Furthermore, according to the criteria the compensation of the members of the management board should be appropriate and include variable parts with short and long-term perspectives. But neither the adequacy of the compensation is operationalised nor is the level of fixed compensation to be oriented to the financial power of the company. This could be a limitation in the use of the GCGC for the evaluation of the corporate governance quality of growth companies.

Therefore, a more detailed analysis of the supervisory board is undertaken apart from the analysis of the conformity with the GCGC criteria.

Methodology

The empirical study is undertaken for the German companies listed on Tec-Dax, Deutsche Börse's segment for high-technology companies on the basis of information from the year 2003, if possible from 31.12.2003. The segment of the stock exchange was selected as its listed companies have most of the described characteristics of growth companies. In order to determine the corporate governance quality of growth companies, the conformity with the criteria of the GCGC – in the version from 21.05.2003 – as well as further corporate governance information were collected. Only 23 of the 30 companies listed on Tec-Dax are analysed because the other seven companies either did not publish their annual report between 01.06. and 31.12.2003 or did not have their headquarters in Germany so that the underlying version of the GCGC does not apply to them. In order to allow a comparison of the results to those of more mature companies, the same analysis was also undertaken for the 30 German companies listed on the Dax segment and the 43 German companies listed on the M-Dax segment. Assuring maximum objectivity, only publicly available information that informed investors can receive is analysed, like annual reports, corporate governance reports or agendas of annual meetings. The data collection was undertaken following a fixed retrieval strategy. The corporate governance quality is computed as a function of the conformity with all 67 shall-recommendations and 16 should-suggestions. Every single criterion within these two groups possesses the same weighting. For the analysis of the effectiveness of the supervisory boards, the profiles of the members were screened, evaluating their independence and qualifications. As the sample size is very small, it is not possible to use elaborate statistical methods. Furthermore, this article is of an explorative nature as the knowledge on this topic is still very limited. Therefore, only descriptive results can be shown at this point.

Conformity of German Growth Companies

In the next two paragraphs the results of the conformity of German growth companies with the 83 shall-recommendations and should-suggestions are presented. First, the overall level of conformity for the 23 Tec-Dax companies is described. After that, the critical criteria that are not fulfilled by more than 50 % of the companies are addressed.

Level of Conformity

The analysed companies possess an average conformity of 83 % with all criteria of the GCGC. The spread between the companies with the highest level and the lowest level of conformity is 28 points[4], which indicates that different levels of attention are dedicated to corporate governance among the companies. Three of the companies have a very good corporate governance quality with six or less deviations from the 83 criteria, representing a conformity level of at least 93 %.

These results compare to an average conformity of 90 % in the Dax segment and of 83 % in the M-Dax segment. The higher average corporate governance quality among the more mature and bigger Dax companies can be interpreted twofold: either the commitment of those companies to good corporate governance is higher or the criteria of the GCGC might be more suited for bigger companies.

There are clear differences when looking at the conformity with the criteria in the three areas management, internal control, and external control. The highest average conformity is 93 % for external control, which represents only 2,2 deviations from the 29 criteria under this heading. In contrast to this,

[4] For detailed information on the results including the rankings for the companies see Bassen et al. 2004.

the average conformity with the criteria in management and internal control is lower with 81 % and 75 % respectively. This means that especially the criteria associated with the effectiveness of the work of the supervisory board – which has a special importance in the case of growth companies – are not comprehensively fulfilled.

This indicates that the overall conformity of Tec-Dax companies is relatively high but two restrictions exist: Particular companies have a low overall conformity and many companies have a low conformity with criteria concerning the internal control. It might be that the commitment to good corporate governance differs between the companies. Some companies attain a very high level of conformity and show their commitment by publishing comprehensive corporate governance reports. In contrast to this, other companies comply only with a number of the criteria, often without a sufficient explanation why they do not fulfil all criteria. There are even some companies that misinterpret the character or the content of criteria, may it be intentional or unintentional. These companies should pay more attention to their corporate governance and the publications on this topic in order to respond to its high importance.

Critical Criteria

A critical criterion is a recommendation or a suggestion that is fulfilled by 50 % or less of the analysed companies. There are eleven of the 83 criteria that are critical for Tec-Dax companies; all of them are should-suggestions. The shall-recommendations have an average fulfilment of 93 %, which means that 1,6 of the 23 companies on average do not fulfil a specific criterion. The lowest level of fulfilment is 52 %. In contrast to this, the fulfilment of the 16 shall-recommendations is much lower with an average of 40 %, which relates to 13,9 companies that do not fulfil a specific criterion. The number of critical criteria is comparatively higher than among the Dax companies, where only four criteria are critical. On the M-Dax the number is equally eleven. Among the critical criteria only one is particularly relevant for growth companies. It concerns the variable compensation of the members of the supervisory board that should include long-term elements with risk character. This relates to the specific requirement that the incentives of the managers are recommended to support a long-term focus. Only 30 % of the companies on the Tec-Dax fulfil this criterion. The other critical criteria are also of importance, but do not concern the specific requirements of growth companies that were introduced in chapter 2.2. Among them are, for example, two criteria that concern the compensation and the structure of the supervisory board, which is important for all companies.

Figure 2 about here

Overall, the analysis of the critical criteria also supports the result that the corporate governance of the Tec-Dax companies is of high quality if measured by the conformity with the criteria of the GCGC. These findings permit the question ~~if~~ whether the GCGC and the corresponding reporting are well suited for the requirements of growth companies. These doubts arise because the code was primarily targeted at bigger public companies without including specific criteria for particular types of companies. For example, the code asks for the establishment of committees for different topics. But given the small number of members in growth companies' supervisory boards, this requirement can be considered to be inefficient. This example shows that adaptations of the GCGC to the characteristics of growth companies as a whole and to the situation of the specific company are required.

Quality of Supervisory Boards

Because of the high importance of an effective supervisory board in growth companies and the fact that the effectiveness is not fully covered by the GCGC criteria, a more detailed analysis is done on the quality of the supervisory boards of the Tec-Dax companies. The analysis is undertaken based on the particular requirements of the control function of the supervisory boards of growth companies, namely the independence and the qualification of its members.

An effective supervisory board should have independent members that complimentarily possess the three qualifications control, professional and leadership competence. Independence comprises professional, personal and economic independence, which means that the members should not be former members of the management board, family members or friends of the managers or representatives of the parent company. (Markman et al. 2001: 285) Control competence means that the supervisory board members possess experience from supervisory boards outside the group. Professional competence can be proven by a management position in a company in a related industry or from research in a related area. Finally, members with leadership positions in other companies provide competence in leadership, a requirement to be able to evaluate the business development. (The Telecommunication Development Fund 2002: 9 f.) As the members of the board can complement each other, it is sufficient if the different competences are represented by at least one member. A supervisory board is evaluated as being effective if the independent members as a group have control, professional, and leadership competence. Only independent members were screened for the qualifications because dependent members might not effectively execute the monitoring function. (Grundei/Talaulicar 2003: 192 f.; Bassen 2002b: 158 ff.). The results indicate that of the 152 supervisory board members only 18 can be considered limitedly independent. These 18 members are from boards of eleven companies. So the qualifications were analysed only for the remaining 134 fully independent members. The results imply that seven supervisory boards, which represents 30 % of the total, lack at

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least one of the three competences: One supervisory board does not include a single independent member with control competence, meaning that no member is part of a supervisory board out of the group. In six boards there are no independent members with professional experience, neither from practice nor from research. And three boards lack members with competence in leadership as they do not include an independent member that acts or acted as manager in another company.

Figure 3 about here

These results indicate inefficiencies in a number of supervisory boards, which does not reflect their high importance in growth companies. The high number of boards that lack professional competence is particularly serious as specific knowledge is required to understand and judge growth companies that are associated with a high level of specificity.

The analysis delivers findings that contravene the results from the analysis of the conformity with the GCGC criteria as both, independence and qualification of the supervisory board members were explained to be fulfilled by all companies. As the GCGC does not operationalise the two concepts, different interpretations are possible, which could explain the contradictory results. That leads to the situation that there might be different understandings not only between different companies, but also between the company and the financial markets. There are two possible reasons for this: an imprecise formulation of the recommendations in the GCGC or inefficiencies in the companies' reporting on their corporate governance.

Conclusion: Summary

This article gives an overview on the corporate governance of German growth companies. Because of their very characteristics this topic is of high importance for growth companies. High business risk increases the likelihood of opportunistic behaviour by the managers and at the same time the severity of the consequences of wrong decisions. High agency risk in turn increases the possibilities of opportunistic behaviour. Therefore, the owners of growth companies have a particular interest to implement good corporate governance in their companies. There are different elements that are especially important for these companies, namely effective control by the supervisory board, incentives for the managers to increase the firm value, effective risk management and high transparency. Against this background the corporate governance quality of German growth companies is analysed empirically. The results imply an overall high conformity of the Tec-Dax companies with the GCGC criteria with some exceptions for specific companies and criteria. The results of the empirical analysis indicate that the corporate governance quality of German growth companies measured by the conformity of Tec-Dax companies with the GCGC criteria is relatively high. This is shown by the average level of conformity of the companies as well as by the analysis of the critical criteria. Looking in detail at the quality of the supervisory board, a differentiated result arises: In some of the analysed companies the effectiveness of the supervisory board is questionable as it may lack sufficient independence and qualifications. Overall, there are great differences between the conformity among the single companies as well as between the fulfilment of specific elements. These restrictions can be explained by two different approaches. They can either be caused by a limited commitment of the companies or by the fact that the GCGC and the relevant reporting by the companies might not be perfectly appropriate for growth companies.

Finally, a possible limitation of the analysis must be noted as Tec-Dax companies best represent growth companies but possibly do not possess all of their characteristics. Moreover, the sample size is rather small so that the generalizability of the results may be questioned.

Outlook

Based on the findings of earlier research and this empirical analysis, no final conclusion on the corporate governance of German growth companies can be drawn. The current level of knowledge does not suffice to precisely define the specific requirements for the corporate governance of growth companies and analyse its quality. Therefore, further research has to undertaken. This article might serve as a basis for the hypothesis of a larger scale analysis.

Apart from the need for action on the part of researchers, the growth companies themselves as well as the policy makers should increase their commitment to this topic. The companies that do not yet possess effective corporate governance should improve their structures and processes in order to secure a positive business development as poor corporate governance might prevent potential investors from investing in the company and thereby weaken its growth potential. Apart from that, policy makers should consider adaptations of the GCGC for growth companies. Better-suited specific recommendations can help companies and the investors alike to better evaluate and improve the corporate governance. This is in the best interest of all, as it might add to a positive business development.

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Appendices

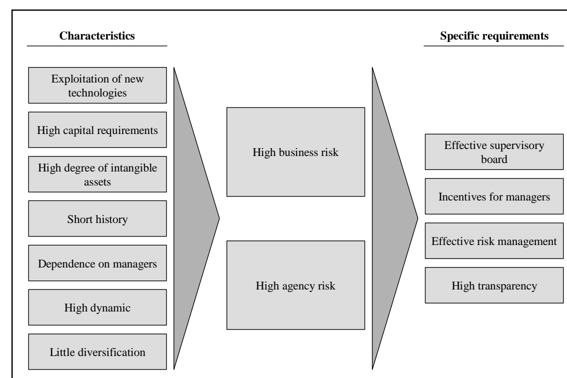

Figure 1. Derivation of specific requirements

Figure 2. Critical GCGC criteria

Tec-Dax 30 - Critical Criteria		
Criteria	Deviations	Fulfilment
Explanation of deviations from "should-suggestions"	21	9 %
Parts of compensation of supervisory board members related to long-time business success	19	17 %
Transmission of entire general meeting over Internet	19	17 %
Staggered supervisory board	19	17 %
Accessibility of the voting representative during general meeting	17	26 %
Chair of audit committee not chairman of supervisory board	17	26 %
Variable compensation of management board members with short- and long-term elements with risk character	16	30 %
Delegation of preparation and decision to commissions of supervisory board	15	35 %
Implementation of commission of supervisory board for appointment and compensation of management board members	14	39 %
Meeting of supervisory board without the management board if required	13	43 %
Existence of commissions for specific topics (strategy, compensation, investments, etc.)	13	43 %
n = 83 criteria ∅	**13,9**	**40 %**

Figure 3. Quality of the supervisory boards

Tec-Dax 30 – Quality of Supervisory Boards	
Requirements	Deviations
n = 23 supervisory boards	
Independence	0 supervisory boards
Control competence	1 supervisory board
Professional competence	6 supervisory boards
Leadership competence	3 supervisory boards
Deviations from at least one of the four requirements	7 supervisory boards