

DISCLOSURE OF INDIVIDUALIZED EXECUTIVE COMPENSATION FIGURES: AN EMPIRICAL ANALYSIS OF COMPLIANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE

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Abstract

From 2002 to 2005, the German Corporate Governance Code advised that stock listed companies should (voluntarily) disclose individualized executive compensation figures. In a sample of big publicly traded German companies, we examine which determinants drive firms to comply with that “soft law” requirement. Using a probit model, we consider 15 explanatory variables. We find that block-holdings, average executive remuneration, book-to-market ratio and the percentage of union representatives in the supervisory board significantly decrease the likelihood of disclosures on individualized executive compensation numbers. Firm size, the absolute number of supervisory board members and the presence of takeover activity turn out as having a significant positive influence on the disclosure behavior. Additionally, we find that it was less likely in 2002 that individualized remuneration figures were published, indicating that Code recommendations are considered as more binding than Code suggestions.

Keywords: corporae governance, German governance code, board

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Executive Compensation and The German Governance Code

Regulation concerning disclosures of executive compensation figures has undergone a significant change in Germany during the last decade. Traditionally, Art. 285 No. 9 of the German Commercial Law (Handelsgesetzbuch, HGB) demanded disclosures about the total amount of fixed and variable compensation of the management board members. According to Art. 286 (4) HGB, such numbers were not allowed to be disclosed in cases where conclusions about the remuneration of single board members were possible. This regulation was explained by the legislator’s fears that such disclosures would violate privacy protection, a base right deductible from the German constitution. However, in 2005, this approach changed with an amendment that made disclosures of individualized executive compensation figures a legal requirement for financial years beginning after December 31st 2005 (German Parliament 2005). This decision was caused by a longstanding public debate about the amount of management compensation, which was frequently perceived as exaggerated. Executive compensation made headlines in the mass media

especially in context of the hostile takeover of *Mannesmann* by *Vodafone* in 2000, and in a following lawsuit courts had to judge whether settlements paid to the former company officials were appropriate.¹ This made (some) compensation practices known to the general public. With the German economy facing an overall downward trend, the impression spread that a lot of board members behave in a self-serving fashion while at the same time they lay off their staff.

However, the amendment of 2005 has a precursor: From 2002 to 2005, the German Corporate Governance Code (GCGC) advised companies to disclose individualized executive compensation numbers on a voluntary basis. The Code is not law itself but Article 161 of the Stock Corporation Act forms its legal base (Nietsch 2005: 371). The GCGC aims to define internationally recognized standards for good and responsible governance that are formulated as *recommendations* or *suggestions* (Kühne & Fuss 2003: 229).²

¹ See e.g. “Germany’s fat cats on trial” (Economist, Sep 25th 2003) and “Corporate Germany on trial” (Economist, Jan 23rd 2004).

² The actual and previous versions of the Code can be found on <http://www.corporate-governance-code.de/index-e.html>.

Companies have to disclose annually any deviation from the Code's *recommendations* in a Declaration of Conformity. This is sometimes labeled as a "comply or explain" approach (Cromme 2005: 363). The first Declarations had to be published for the financial year 2002. The Code's *suggestions* are weaker than *recommendations*; they do not have to be published.

Disclosures of individualized executive compensation figures initially were a *suggestion* in the first version of the Code before it turned into the following *recommendation* in 2003:

"Compensation of the members of the Management Board shall be reported in the Notes of the Consolidated Financial Statements subdivided according to fixed, performance-related and long-term incentive components. The figures shall be individualized." (GCGC 2005, Paragraph 4.2.4).

Since 2006, such disclosures are mandatory. Voluntary remuneration disclosures corresponding to the GCGC are observable for the financial years 2002, 2003 and 2004.³ In our analysis we raise the question which determinants or firm characteristics drive companies (not) to comply with the Code's advice to publish individualized executive compensation figures.

The remainder of the paper is organized as follows: In chapter 2, we outline our hypotheses and specify the model for an empirical analysis. In chapter 3, the sample and data sources are described. In chapter 4, the main findings of the study will be discussed. The article ends with a summary and discussion in chapter 5.

Hypothesis Development and Model Specification

In our analysis, we assess the influence of 15 independent variables on a company's disclosure behavior with respect to the GCGC's advice to publish individualized executive compensation figures. The variables proxy for important firm characteristics. The compliance behavior of a particular company is measured by the dummy variable COMPDISC ("compensation disclosure") which takes a value of 1 if a company discloses individualized compensation figures and thus follows the Code's advice and zero otherwise. As the dependent variable is categorical, we use a multivariate probit model for the analysis of the influence of the independent variables.

It is not that obvious which firm characteristics might have a strong bearing on the disclosure behavior. Thus, we use a relatively high number of independent variables selected according to the framework outlined by Börsch-Supan/Köke (2002). The authors argue that missing explanatory variables are a general problem of empirical studies on corporate governance and suggest the complete use

of specific information concerning ownership, financial and board structure, competition situation and takeover activities. Table 1 provides an overview over the variables used in our analysis and the predicted signs of the influence on compliance with the Code's advice.

To account for ownership structure, we first consider *block-holdings* (blkhol). Block-holdings by non-banking companies are measured as the fraction of common stock held by the three largest shareholders. We assume that the presence of block-holdings decreases the likelihood of compliance as the Code is an instrument intended to strengthen external (i.e., market) control. Block-holders are, in fact, insiders because they have access to a company's supervisory board (Hackethal et al. 2005: 398). The code requires disclosure of individual compensation for management and supervisory board members. With the strong capital connection of big German companies it is likely that supervisory board members of one firm are management board members in another. (Schilling 2001: 149) This reduces the incentives of block holder representatives to press for individual disclosures of management board remuneration. Inversely, we hypothesize that the same arguments lead to an increasing likelihood of Code compliance if the level of block-holdings is low (and market pressure high).

In the German "insider" corporate governance system, universal banks have traditionally played an important role (Hackethal et al. 2005: 399 ff). Thus, we use *bank ownership* (bnkown) as a proxy for monitoring activities of universal banks (bank ownership is defined as a percentage of common stock owned by universal banks). "Insider control systems" typically provide large control benefits for the major shareholders who are in our case banks (see Hart 1995, for some critical comments). Bank dominance has constituted a stable and effective element of corporate governance. Gorton/Schmid (2000), among others, provide evidence of the positive influence of bank block holdings on the performance of German companies. However, the relationship between bank ownership and the degree of compliance with the Code is not straightforward. On the one hand, it is possible that the above-mentioned block-holder arguments apply as well. On the other hand, banks might have interests different than those of (industry) block-holders. However, Edwards/Nibler (2000) argue that bank influence on company policies should not be over-estimated. We therefore make no predictions on the expected sign.

We do not have data to directly observe the fraction of a company's shares that are held by foreigners. However, if a company's shares are listed at foreign exchanges, this indicates that this company tries to attract foreign investors. If disclosures about individualized executive compensation figures are international best practice (as the Code claims), the likelihood of disclosing these numbers should be

³ Financial reports for 2005 are not yet available for (most of) the sample firms.

higher if a company is listed at least at one foreign stock exchange. The dummy variable “xlist” takes a value of 1 for a foreign listing, and we expect a positive sign for this variable.

Table 1. Governance Issues and Proxy Variables

Variable	Abbreviation	Measurement	Pred. Sign
Block-holdings	blkhol	Fraction of common stock held by the three largest shareholders	–
Bank Ownership	bnkown	Percentage of common stock owned by universal banks	?
Crosslistings	xlist	Dummy variable taking a value of 1 if a company is cross-listed at one or more foreign exchanges (and 0 otherwise)	+
Leverage	levrge	Ratio between total debt and total assets	+
Free Cash Flow	fcfps	Free cash flow per share (Compustat item)	+
Book-to-Market Ratio	btm	Ratio between book and market values of equity	?
Board Size	nbm	Total number of the Management Board members	?
Supervisory Board Size	nsbm	Total number of the Supervisory Board members	?
Union Functionaries in Supervisory Board	umpctg	Percentage of union functionaries in the supervisory board	+
Executive Compensation	avgep	Average Executive Compensation per member of the Management Board	–
Firm Size	logbs	Natural logarithm of total assets	+
Profitability	profbly	Return on Equity	?
Takeover Announcements	tkover	Takeover-relevant legal announcements pursuant to the WpÜG (dummy variable)	+
Dummy variable for year 2002	y2002	Dummy variable taking a value of 1 for 2002 and 0 otherwise	–
Dummy variable for year 2003	y2003	Dummy variable taking a value of 1 for 2003 and 0 otherwise	?

Leverage depicts a company’s financial structure. We define leverage (*levrge*) as the ratio between total debt (numerator) and total assets (denominator). Debt can also be a lever of control (Jensen 1986; Cable 1985). Debt holders are expected to monitor firm performance more actively if their share in the capital structure increases (e.g., Hutchinson/Gul 2004). Financial leverage can thus be used as a proxy for external control through debt holders. We expect a positive sign for this. Additionally, we use *free cash flow per share* (*fcfps*) and the *book-to-market ratio* (*btm*) as proxies for a company’s financial structure. With free cash flow increasing, shareholders face a higher risk of management profligacy, which should lead to tighter controls and therefore pressures for additional disclosure. The *btm* stands for growth opportunities. Growth opportunities may on the one hand lead to more controls whether there are exploited, on the other hand optimistic shareholders may slacken in their wishes for disclosure. We therefore do not predict a sign for this variable.

Management board size (*nbm*), *supervisory board size* (*nsbm*), the *percentage of union representatives in the supervisory board* (*umpctg*), and *average remuneration of the management board members* (*avgep*) are used to account for the board

structure. The absolute number of variables considered is relatively high here, to cover the peculiarities of the German two-tier Board Structure. On one hand, the (large) size of the supervisory board is often considered as a problem of the German corporate governance system (Wooldridge/Pannier 2005: 230). On the other hand, a large number of supervisory board members might decrease the influence of particular interest groups like block-holders, banks or unionists, which might work in favor for the control activities of minority shareholders. Remuneration of executives (but also of supervisory board members) plays an important role in providing incentives and attenuating principal-agent problems. Evidently, higher average executive compensation increases the likelihood that payments are higher than appropriate and include large CEO remuneration, which, in turn, induces the receivers of those payments not to give full particulars on them. Thus, we hypothesize a negative influence on compliance.

Firm size (*logbs*) stands as an explanatory factor for a range of governance issues, i.e., public monitoring, political costs or the ability to draw up market barriers. Firm size is quantified here as the natural logarithm of total assets. We expect a positive influence of firm size on compliance

behavior because of the increasing public monitoring and political costs. This becomes obvious if one recalls that CEO remuneration of DAX30-constituents is frequently published in German business magazines. Smaller firms (i.e., Non-Dax30 firms) are not of interest there.

Finally, a measure for *takeover activities* is needed. In Germany, takeover activities are associated with mandatory announcements pursuant to the Securities and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz, WpÜG). This law regulates offers to purchase securities that have been issued by a listed company that is target of takeover activities. Any announcement concerning a particular target company will signify that at least for this company a market for control exists. To proxy for takeover activities, we use a dummy variable (*tkover*) taking a value of 1 if there is a takeover relevant legal announcements pursuant to the WpÜG. We presume a positive relationship between takeover activities and the willingness to publish remuneration particularities, because managers facing a takeover aim to signal that the company is well-governed and that benefits from a takeover are low for shareholders.

We use two additional dummy variables for the respective years. The first one (*y2002*) takes a value of 1 for the financial year 2002 (and 0 otherwise), the second one a value of 1 for the financial year 2003 (and 0 otherwise). The dummy variable for year 2002 is of particular interest, because the Code's advise to disclose individualized numbers was a suggestion during this very year (while it was a recommendation in the following years). As recommendations are more binding than suggestions, we suppose that the likelihood of compliance was lower in 2002 than in 2003 and 2004.

We generally perform two-tailed tests of the zero hypotheses that the variables in total (i.e., the model) and each single variable as well, provide significant explanatory power on the value the

dependent variable takes. The model is as follows:

$$COMPDISC_i = \alpha_0 + \alpha_1 y2002_i + \alpha_2 y2003_i + \alpha_3 blkhol_i + \alpha_4 bnkown_i + \alpha_5 levrg_e_i + \alpha_6 nbm_i + \alpha_7 nsbm_i + \alpha_8 umpctg_i + \alpha_9 avgp_i + \alpha_{10} \log bs_i + \alpha_{11} profblty_i + \alpha_{12} xlist_i + \alpha_{13} tkover_i + \alpha_{14} fcjfps_i + \alpha_{15} bm_i + \xi_i \quad (1)$$

We control for a possible presence of heteroscedasticity by using White-adjusted standard errors in the multivariate analysis (White 1980).

Data sources and Sample description

In our study, we analyze German companies listed in DAX 30 and MDAX in the beginning of 2003. These are the biggest German companies. Our initial sample included 80 companies and 240 firm years. As outlined in Table 2, 16 bank, financial service and insurance companies were excluded from the sample because of their different financial structure. Two firms in the legal form of a German partnership limited by shares were excluded as well, because they had a different legal and corporate governance structure. Companies not domiciled in Germany are also excluded from the sample, because they are not (directly) subject to German regulation and thus might follow different corporate governance practices.

We finally arrive at a test sample of 60 companies with observations for the years 2002, 2003 and 2004. That makes, in total, 180 firm years. Financial data is obtained from the *HOPPENSTEDT BILANZDATENBANK* and *COMPSTAT* databases. Declarations of conformity, as published by the companies, were analyzed qualitatively. The ownership structure of the sample companies was obtained from the *HOPPENSTEDT AKTIENFUEHRER*. Other stock information is taken from the *DATASTREAM* databank. Information about takeover activities is obtained from the website of the *BUNDESANSTALT FÜR FINANZDIENSTLEISTUNGS AUFSICHT (BAFIN)*.

Table 2. Sample Selection

	Item	Firms	Firm years
	DAX companies	30	90
+	MDAX companies	50	150
=	Sum	80	240
-	Insurance companies	4	12
-	Banks	6	18
-	Financial service companies	6	18
-	Legal form of partnership limited by shares (KGaA)	2	6
-	Foreign domiciled companies	2	6
=	Total number of firms / firm years	60	180

Discussion of the Main Findings

Companies in our sample are very diverse in many respects, e.g. profitability, ownership structure, or number of board and supervisory board members. The standard deviation of bank ownership, for example, is more than twice the mean. This is true for free cash flow per share. Descriptive statistics of the variables can be found in Table 3.

Table 4 shows that eight of the independent variables have a statistically significant influence on the disclosure of individualized executive compensation figures. While bank ownership and cross-listings do not seem to have significant influence on the compliance behavior, it turns out that the likelihood of disclosing individualized executive compensation figures decreases considerably with increasing block-holdings. This (expected) finding can theoretically be justified by two arguments: First, block-holders are typically represented in the

supervisory board. Thus, they do not need disclosures to gather information about a company or, in particular, about executive compensation. As disclosures on individualized executive compensation figures typically go in hand with disclosures on individualized supervisory board member compensation, they indeed have negative incentives in forcing managers to follow the code. Second, block-holdings are negatively correlated with free float and thus with capital market pressure. In contrast to block-holders, minority shareholders do not have the access to supervisory board and to internal information. Thus, they have to rely on the disclosed information. Therefore, it does not surprise that lower block-holdings, i.e., higher free float, increases the likelihood of compliance with the suggestion/recommendation to disclose individualized executive compensation figures

Table 3. Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
compdisc	180	0.23	0.42	0.00	1.00
y2002	180	0.34	0.47	0.00	1.00
y2003	180	0.33	0.47	0.00	1.00
blkchol	180	0.43	0.26	0.00	1.00
bnkown	180	0.04	0.08	0.00	0.43
levrge	180	0.65	0.15	0.22	0.97
nbm	180	5.18	2.09	2.00	14.00
nsbm	180	14.85	4.85	3.00	25.00
umpctg	180	0.11	0.07	0.00	0.50
avgep	180	1185.97	718.60	236.36	3639.61
logbs	180	15.36	1.90	8.67	19.05
profit	180	0.23	0.16	-0.17	0.75
xlist	180	0.33	0.47	0.00	1.00
tkover	180	0.04	0.21	0.00	1.00
fcfps	180	1.57	3.76	-14.37	20.55
btm	180	0.75	0.47	0.09	2.80

Table 4. Probit Results

Variable	Coefficient	Rob. Std. Err.	z-Value	Prob (P>z)
y2002*	-0.546	0.296	-1.850	0.065
y2003	-0.184	0.263	-0.700	0.483
blkchol***	-1.284	0.476	-2.700	0.007
bnkown	1.766	1.490	1.190	0.236
levrge	-1.196	1.100	-1.090	0.277
nbm	-0.049	0.076	-0.650	0.514
nsbm*	0.064	0.037	1.710	0.086
umpctg**	-5.936	2.346	-2.530	0.011
avgep*	0.000	0.000	-1.680	0.092
logbs*	0.213	0.121	1.770	0.077
profit	0.150	0.958	0.160	0.875
xlist	-0.004	0.297	-0.010	0.990
tkover*	0.921	0.543	1.690	0.090
fcfps	0.012	0.036	0.340	0.734
btm**	-0.846	0.407	-2.080	0.037
Intercept	-1.822	1.418	-1.280	0.199

n = 180; Wald-Chi-Sqr. = 36.99***; Pseudo-R-Sqr = 0.1978.

*, **, *** indicate the level of significance (10%, 5% and 1%).

The coefficient on the book-to-market-ratio (btm) also turns out as being negative and significant while the other proxies for *financial structure* do not have significant influence on the compliance behavior. A possible interpretation of this finding is that firms with higher book-to-market ratio have lower growth opportunities, increasing the likelihood of over-investing surplus cash. This gives managers incentives to signal that they do not use surplus cash to expropriate investors.

Three of the variables used to proxy for *board structure* have a significant influence on the compliance behavior. First, we find evidence that each additional supervisory board member increases the likelihood of the dependent variable taking a value of 1 i.e., disclosing individualized compensation numbers. This can be explained by an argument that an increasing total number of supervisory board members decreases the influence of particular interest groups. Independent supervisory board members, then, are more likely to act in the interest of minority shareholders. Second, we find that the likelihood of disclosing individualized remuneration figures decreases with an increasing percentage of union representatives in the supervisory board. This is surprising only at a first glance: As unionists often complain about excessive compensation for board members, one would expect that a larger influence of union officials in supervisory boards increases the likelihood that companies do publish individualized compensation figures. However, the actual interrelationship between disclosure behavior and union representation is the reverse. A possible explanation for this finding is that unionists might use questions related to executive remuneration in negotiations about other employee related issues. Thus, they do not want to lose this pressurising instrument. The above-mentioned lawsuit against former *Mannesmann* officials fits with our finding: A former trade union leader who was a member of the supervisory board, did not exert any actions to prevent the payments in question. The average remuneration of board members itself has a negative impact on the likelihood of individualized compensation disclosures. This is an appealing finding: The more board members earn, the less they are willing to publish these numbers. However, there is a limitation to this interpretation because of missing data with respect to the variance in board compensation. For example, it might be that the height of CEO pay has an influence on the reporting behavior, but we cannot examine this explicitly because there is no possibility to obtain data on CEO remuneration from those firms that did not publish individualized figures.

Firm size also helps to explain the compliance behavior. The coefficient on the firm size variable is significantly different from zero and has a positive sign, indicating that bigger companies are more

likely to disclose individualized remuneration figures. This can be traced to the fact that there is greater public monitoring and interest in bigger companies.

If a company is a target of takeover activities, the likelihood of individualized disclosures also increases. This is not surprising either, because the management of a takeover target firm has incentives to signal that the firm is well-governed. This might increase the level of total compliance with the Code and in particular with the recommendation of disclosures about remuneration, because not reporting these numbers might lead the shareholders to conclude that the management is overpaid and thus inefficient.

Finally, the coefficient on the dummy variable for the year 2002 is, as expected, negative and significantly different from zero. This indicates that the individualized executive compensation figures were less likely to be disclosed in 2002 than in 2003 or 2004. This allows us to draw the conclusion that the Code's recommendations are indeed considered as more binding than its suggestions.

Summary

Using a probit model, we investigated the influence that 15 different independent variables have on the compliance level with the GCGC advice to publicize individualized compensation figures. It turned out that the independent variables under consideration significantly help to explain the compliance behavior. We conclude that during 2002 through 2004, compliance with the code was informative about important firm characteristics and thus interesting under a signaling perspective. While this questions the new and tougher regulation at least to some extent, the legal amendment might decrease agency costs for minority shareholders. As outlined, block-holders have an access to internal information. Obviously, they do not consider it as necessary to disclose such information to minority shareholders. Hence, the amendment strengthens the position of minority shareholders as it provides them with more information than they would otherwise dispose of. However, it is hard to predict whether this advantage will compensate for the negative consequences of the tougher regulation.

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