Effect of Board Independence on Incentive Compensation and Compensation Disclosure: Evidence from Europe

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ABSTRACT

My thesis examines how the lack of board-of-director independence affects the structure and disclosure of executive compensation. I find that European companies with more insiders on their boards grant their executives more incentive compensation, after controlling for the level and economic determinants of executive compensation. This effect is more pronounced in countries with less protection for outside shareholders. The companies with more insiders on their boards also disclose more transparent information about executive compensation. Overall, my evidence supports the contracting hypothesis, in which capital market investors understand potential detrimental effects of insiders and drive companies to mitigate these effects through greater incentive compensation and improved compensation disclosure. The evidence is inconsistent with the opportunism hypothesis, in which risk-averse insiders grant themselves more fixed pay and disclose less transparent information about their compensation.

Thesis Supervisor: S.P. Kothari
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1. Introduction

I analyze the structure and disclosure of executive compensation in relation to the dependence of boards on company executives. The analysis sheds light on a broader question: Do companies lacking certain governance mechanisms, such as independent board monitoring, respond by emphasizing alternative governance mechanisms, such as incentive compensation and transparent disclosures about executive compensation? The proponents of independent boards have long argued that top executives serving on company boards (hereafter, insiders) exploit boards' authority and inflict real costs on their companies (Jensen, 1993). However, whether companies' compensation policies are *a protection against* or *an outcome of* the opportunistic behavior of insiders remains controversial, as articulated by two competing hypotheses: the contracting hypothesis and the opportunism hypothesis.[1]

Under the *contracting* hypothesis, executive compensation minimizes agency costs between top executives and shareholders. This hypothesis predicts that companies with dependent boards use executive compensation to protect shareholders from the greater agency costs in two ways.[2] First, companies with dependent boards grant proportionately greater incentive compensation to align interests of insiders with those of shareholders. Second, companies with dependent boards disclose more transparent information about executive compensation to assure shareholders that insiders do not receive non-optimal compensation.

In contrast, under the *opportunism* hypothesis, insiders capture the pay-setting process at the expense of the shareholders. Assuming risk-averse and rational insiders, the opportunism hypothesis predicts that insiders on dependent boards opportunistically set compensation

[1] See Holmstrom (1979) and Datar et al. (2001) for theory, and Core et al. (2003) and Bertrand and Mullainathan (2001) for a general discussion and empirical evidence on the contracting hypothesis. See Bebchuk et al. (2002) for a general discussion and empirical evidence on the opportunism hypothesis.

[2] I define dependent boards as boards in which insiders constitute a high proportion and/or company CEOs serve as board chairs.

policies in two ways. First, insiders on dependent boards grant themselves proportionately smaller incentive compensation, since insiders are typically underdiversified and incentive compensation is more risky than salaries. Second, insiders on dependent boards conceal their opportunistic actions by disclosing less transparent information about executive compensation.

In this paper, I perform tests designed to discriminate between the contracting and opportunism hypotheses, using hand-gathered data from the annual reports of the 158 largest European companies for the years 1999 through 2001. The choice of European companies leads to tests more powerful than those using U.S. companies, since European companies display a greater variation in board structure, executive compensation, and compensation disclosure. Furthermore, the choice of European companies enables me to examine the effect of alternative governance mechanisms on the relation between board dependence and executive compensation since many institutional characteristics vary significantly across countries in Europe (La Porta et al., 1998; Bushman and Smith, 2003).

My tests focus on the *proportion* of incentive compensation rather than the *level* of executive compensation, since the former more clearly discriminates between the contracting and opportunism hypotheses. The contracting and opportunism hypotheses both predict greater levels of executive compensation in companies with dependent boards. According to the contracting hypothesis, companies with dependent boards grant greater incentive compensation but thereby render executives less diversified. In return, executives demand and receive risk premiums, which increase the levels of compensation (Core et al., 1999). According to the opportunism hypothesis, insiders on dependent boards pay themselves more regardless of the form of pay (Bebchuk et al., 2002). Consequently, I test the empirical validity of the

contracting and opportunism hypotheses by examining the incentive-based proportion of executive compensation, while controlling for the level of compensation.

I document three main findings. First, I find that companies with dependent boards grant greater incentive compensation, after controlling for the level and economic determinants of executive compensation. Second, companies with dependent boards grant even greater incentive compensation in countries with fewer alternative governance mechanisms to protect outside shareholders. Finally, companies with dependent boards also disclose more transparent information about executive compensation, after controlling for the effect of country-specific regulations. My findings are robust to a battery of alternative test specifications, controlling for sample selection bias and potential endogenous relations between incentive compensation, level of compensation, and board dependence.

In sum, the evidence supports the contracting hypothesis, suggesting that companies offset the opportunistic behavior of insiders through greater incentive compensation and improved transparency of compensation disclosure. Also in line with the contracting hypothesis, companies rely on incentive compensation more strongly when fewer alternative governance mechanisms are available. On the other hand, my analyses show that the relation between board dependence and executive compensation is nonlinear. Companies with boards not dominated by insiders increase incentive compensation and improve compensation disclosures in response to increasing insider influence, supporting the contracting argument. However, companies with boards dominated by insiders (i.e., boards with a numerical majority of insiders and with CEOs serving as board chairs) neither increase incentive compensation nor improve compensation disclosures in response to increasing insider influence. Therefore, the opportunism hypothesis cannot be rejected for companies with boards dominated by insiders.

My findings suggest that the positive relation between board dependence and incentive compensation to executives would be less pronounced—or even reversed—for U.S. companies, which have CEO-dominated boards and several alternative mechanisms for outside shareholder protection. Consistent with this prediction, the few empirical studies using U.S. companies show that dependent boards result in less equity-based executive compensation (Mehran, 1995; Ryan and Wiggins, 2004).

My findings also contribute to the literature on the economic implications of dependent boards. Prior research mostly examines adverse effects of insiders and either implicitly or explicitly recommends full board independence (Jensen, 1993; Yermack, 1996). An opposing strand of literature recognizes operational benefits of insiders, such as superior information flow and company decisions (Johnson et al., 1996). Regarding this debate, my findings suggest that while companies cannot afford to wholly exclude insiders from their boards given the operational benefits, they can alleviate related agency costs through the structure and disclosure of executive compensation.

The remainder of the paper is structured as follows. Section 2 provides a review of the literature and develops two hypotheses about the effect of board independence on incentive compensation and transparency of compensation disclosure, respectively. In Section 3, I discuss the sample and define empirical variables. I document the relation between board independence and incentive compensation in Section 4 and the relation between board independence and transparency of compensation disclosure in Section 5. Section 6 presents conclusions.

2. Hypothesis development

A board of directors is rarely fully independent of top management. A quarter of the directors on the boards of the top European and U.S. companies also serve as company executives (insiders).[3] Moreover, a third of the board chairs in Europe and a majority of the board chairs in the U.S. also serve as company CEOs (hereafter, CEO-Chairs). The extant literature argues that insiders are among the root causes for ineffective board monitoring. Specifically, insiders cannot effectively monitor themselves on behalf of shareholders. Moreover, insiders impair the otherwise helpful contributions of independent directors (Jensen, 1993). Boards with CEO-Chairs are also less effective since board chairs are more influential in setting board agendas than other directors (Yermack, 1996; Ryan and Wiggins, 2004).

Ineffective board monitoring results in real costs for companies. For instance, companies with dependent boards pay their CEOs more for performance beyond CEOs' control (Bertrand and Mullainathan, 2001), and record greater abnormal accruals (Klein, 2002). In contrast, independent boards represent shareholder interests better in major company decisions such as investments, CEO replacements, and takeovers (Del Guercio et al., 2003; Weisbach, 1988; Cotter et al., 1997; Byrd and Hickman, 1992). Consequently, capital markets favor independent boards by reacting positively to the appointment of outside directors (Rosenstein and Wyatt, 1990).

The preceding discussion focuses on the opportunistic behavior of insiders. However, insiders also serve on boards for reasons of operational efficiency (Johnson et al., 1996; Brickley et al., 1997). For instance, insiders provide boards with company information superior to that provided by outside directors (Fama and Jensen, 1983). Moreover, the presence of

[3] See Table 2 Panel A and Table 3 Panel A.

insiders allows for greater discretion for top executives, which is ex-ante beneficial, especially in highly uncertain business environments (Burkart et al., 1997). Therefore, companies do not fully eliminate insiders despite the associated costs.

The question, then, is whether companies mitigate the adverse effects of insiders through alternative governance mechanisms. The contracting and opportunism arguments make opposite predictions for this question. The contracting argument predicts that various governance mechanisms exist in equilibrium, and that if one mechanism is ineffective, then alternative mechanisms are emphasized. This argument is similar in spirit to a number of previous studies about the substitutability of alternative governance mechanisms: ownership concentration versus legal protection of investors (La Porta et al., 1998); independent boards versus the degree of shareholder orientation in company charter provisions (Gillan et al., 2003); threat of employee termination versus pay-for-performance (Hallman et al., 2004); and product market competition versus the level and structure of compensation (Hubbard and Palia, 1995). The contracting argument implicitly requires that company managers and boards understand the equilibrium between the alternative mechanisms, and that discipline from shareholders and other stakeholders are powerful enough to prevent companies from opportunistically deviating from this equilibrium. The opportunism argument, on the other hand, predicts that the discipline from company shareholders and other stakeholders are not powerful enough to make insiders implement additional mechanisms in response to an ineffective governance mechanism.

In this paper, I examine two alternative governance mechanisms, incentive compensation and compensation disclosure, in response to the increasing dependence of boards

on executives. These two internal mechanisms are readily available to companies and introduce few confounding effects when implemented.

2.1. Incentive compensation

Incentive compensation consists of bonuses and grants of company stock and options. Incentive compensation links executive pay to company performance measures and thus aligns interests of executives with those of shareholders (Core et al., 2003). Unlike alternative mechanisms such as legal protection and takeovers, incentive compensation schemes are easy to initiate and modify according to company needs (Porter, 1992; Perry and Zenner, 2001).

The contracting and opportunism hypotheses make conflicting predictions about the relation between board independence and incentive compensation. The contracting hypothesis predicts that companies with dependent boards prevent managerial abuse by emphasizing incentive compensation. In contrast, the opportunism hypothesis predicts that risk-averse and underdiversified insiders influence compensation committees to provide proportionately greater salaries.

Most literature about executive compensation examines the level of compensation and presents contradictory findings (Core et al., 2003). Lambert et al. (1993) predict, but fail to document, that insiders exploit their companies through excessive compensation. Core et al. (1999) find that CEOs are paid excessively under weak governance, but the level of CEO compensation decreases with the proportion of insiders. Perry (2000) argues that CEO compensation in the U.S. in the 1990s displays characteristics consistent with both the contracting and opportunism hypotheses.

The effect of board dependence on the structure of executive compensation is rarely studied. In his descriptive paper, Mehran (1995) examines U.S. manufacturing firms in the years 1979 and 1980, and finds that companies with dependent boards grant their executives less equity-based compensation. Similarly, Ryan and Wiggins (2004) examine U.S. companies in 1997 and find that companies with dependent boards grant their independent directors less incentive compensation. Both papers support the opportunism hypothesis, suggesting that insiders exploit their position on the boards to obtain less risky payments. Relative to these papers, I use a recent and more diverse data set, control for the level of executive compensation, and examine the effect of international institutional factors on this relation. Hypothesis 1 states the prediction of the contracting hypothesis.

> ***Hypothesis 1:*** *Incentive compensation, defined as the ratio of the sum of bonus, stock, and option grants to total compensation, is greater in companies with board chairs serving as CEOs and in companies with a greater proportion of directors serving as executives.*

Alternative versions of the contracting and opportunism hypotheses provide directionally opposite predictions from those in this paper. An alternative version of the contracting hypothesis predicts that independent boards grant their executives more incentive compensation to improve corporate governance. This prediction is similar in spirit to Hartzell and Starks (2003), who document that institutional ownership in U.S. companies improves monitoring of executives and also increases pay-for-performance. This version suggests that the independent board reinforces alternative governance mechanisms when insiders' opportunistic behavior is already constrained. In general, the contracting hypothesis implies that companies attempt to maximize share value regardless of the board structure. Accordingly, I assume that

the contracting hypothesis predicts greater use of incentive compensation schemes when such schemes are most valuable, i.e., when insiders have the greatest influence on the boards. Therefore, I rule out this version of the contracting hypothesis.

Similarly, an alternative version of the opportunism hypothesis claims that insiders with superior company information award themselves stock-based grants instead of salaries of equal value (Bebchuk et al., 2002). This choice is non-optimal for the opportunistic insiders. First, executives are risk-averse. Given a level of compensation, they are better off with fixed payments, which are less risky than incentive compensation (Hall and Murphy, 2000). Second, salaries enable executives, whose wealth and human capital are disproportionately invested in their companies, to diversify. Third, salaries provide greater flexibility than stock-based grants of equal value even if executives use their salaries to purchase company stocks from the market, since stock-based grants usually come with exercising and selling restrictions. Therefore, I rule out this version of the opportunism hypothesis.

2.2. Transparency of compensation disclosure

Executives are likely to minimize compensation disclosure when compensation levels are abnormally high and when company performance is poor (Aboody et al., 2004). Shareholders of companies with dependent boards incur a greater risk of receiving poor information about executive compensation for two reasons. First, insiders of dependent boards are more influential in company disclosures. Second, independent directors, who can provide information about executive compensation through alternative channels, are fewer in number.

The contracting and opportunism hypotheses make opposite predictions about the effect of board dependence on compensation disclosure. The former predicts that companies with

dependent boards disclose executive compensation more transparently to convince shareholders that insiders are not transferring wealth to themselves. The latter predicts that insiders influence boards to disclose executive compensation less transparently in order to hide the excessive and non-optimal compensation they extract from their companies.

In a rare study on compensation disclosures, Coulton et al. (2001) find that transparency of CEO compensation disclosure in Australia depends only upon company size and pay level. Relative to their study, I use a larger and more diverse data set in terms of governance structure and executive positions. Moreover, I define transparency of compensation disclosure more broadly by focusing on the type, amount, and quality of the disclosures. Hypothesis 2 states the prediction of the contracting hypothesis.

> ***Hypothesis 2:*** *Companies with board chairs serving as CEOs and companies with a greater proportion of directors serving as executives make more transparent disclosures about executive compensation.*

The transparency of compensation disclosure is unlikely to be determined by board dependence alone. Countries and stock exchanges impose varying disclosure regulations on companies. Furthermore, compensation disclosure differs according to company-specific costs and benefits shaped by industry, growth opportunities, and profitability. In addition, incentive compensation improves compensation disclosure for two reasons. First, stock-based incentives encourage executives to disclose overall company information in order to capture the associated benefits (Nagar et al., 2003).[4] Second, incentive compensation widens the range of executive compensation levels (and is also positively correlated with the level of

[4] Coulton et al. (2001) argue that compensation disclosure is the type of disclosure where the conflict of interest between executives and shareholders is the greatest, regardless of the compensation structure. Hence, the predictions of Nagar et al. (2003) are possibly the least applicable in this context.

comapensation), which in turn attracts closer investor scrutiny and increases the risk of litigation. Hence, companies that grant more incentive compensation avoid such costs by promptly providing more transparent information about executive compensation. My empirical tests control for the above country- and company-specific factors.

3. Sample selection

I gather data on executive compensation for the years 1999 through 2001 from the annual reports of the 158 largest European companies, as given in the Forbes 2000 Global Top 800 list. I also use three databases to collect and cross-check financial information: the Thomson Financial database, the Hoover's database, and the Compustat Global database. Appendix 1 lists the companies in the sample and the average values of the major variables of interest between years 1999 and 2001.

Table 1 Panel A summarizes the sample selection. I exclude 46 companies with insufficient compensation disclosure from the primary tests. Appendix 2 discusses disclosure practices of the European companies, and specifies the disclosure criteria for inclusion in the final data set. The final data set comprises three annual observations from each of the 112 companies with available information about executive compensation. Table 1 Panel B (Panel C) displays the country (industry) breakdown of the final data set. Section 4.2 discusses the selection bias.

Table 2 Panel A presents descriptive statistics for the empirical variables in four categories: board structure, executive compensation, compensation disclosure, and economic determinants of executive compensation. Table 2 Panel B presents correlations among selected variables. My tests use compensation information for top executives, the number of whom is

denoted by *N_Executive*. The median of *N_Executive* is 5. The companies have four types of compensation (with medians in parentheses): salary (€633,000), bonuses (€213,000), stock grants (€0), and option grants (€228,000). Bonuses comprise variable cash payments related to short and long-term incentive plans. Stock and option grants are the values of grants unconditionally allotted to executives. The value of stock grants is the number of shares granted times the annual average stock price. Option grants are valued by the Black-Scholes model, the parameters of which are obtained from company annual reports and the DataStream database. For missing parameters, I use default values comparable to the values of the disclosing companies and U.S. companies.[5] Overall, a top European executive earns €1.4 million a year and holds company stocks and options worth €0.1 million and €0.5 million, respectively.

Table 2 Panel C displays averages of selected variables according to country. Table 2 Panel D displays country-specific institutional characteristics identified by previous research. For comparison purposes, Table 3 Panels A and B respectively exhibit descriptive statistics for the top 150 U.S. companies over the same period and for the 46 European companies excluded due to insufficient disclosure. Consistent with the evidence in Bebchuk et al. (2002), a top U.S. executive earns more, €5.3 million, and holds a greater value of company stocks and options, worth €11.1 million and €6.3 million respectively. Below I define the empirical variables.

3.1. Board dependence (Proxies: InsiderRatio and CEO-Chair)

The proxies for board dependence are *InsiderRatio* (the ratio of the number of directors serving as company executives to total number of directors) and *CEO-Chair* (a dummy variable

[5] Section 4.4. provides sensitivity checks on the default values.

equal to 1 if the board chair also serves as the company CEO and 0 otherwise). Alternative proxies such as executive tenure and affiliated directors are not used, since they are either unavailable or loosely defined even in the U.S. (NYSE Corporate Governance Guidelines, 2002).

InsiderRatio in Europe has a mean of 0.25 and a median of 0.20. It is above 0.50 for 49 observations and 0 for 90 observations. Meanwhile, *InsiderRatio* in the U.S. has a mean of 0.24, similar to that in Europe, but displays lower volatility in the cross-section (Perry, 1999). *CEO-Chair* in Europe has a mean of 0.31, whereas *CEO-Chair* in the U.S. is significantly greater with a mean of 0.81.

3.2. Incentive compensation (Proxy: IncentivePay)

The conventional pay-for-performance definition is "the change in the dollar value of the CEO's stock and options for a 1% or $1 change in stock price" (Core and Guay, 1999). The information about option and stock award dates and stock prices is limited for many companies in my data set. Therefore, following the literature, I define *IncentivePay* as the ratio of the sum of bonus, stock, and option grants to total compensation (Mehran, 1995; Core et al., 1999). European companies, with a median *IncentivePay* of 0.52, grant less incentive compensation than U.S. companies, with a median *IncentivePay* of 0.83.

3.3. Transparency of compensation disclosure (Proxy: Disclosure)

Annual reports serve as the most comprehensive source of information about executive compensation. I observe that alternative company disclosures such as survey participations and news statements provide negligible incremental information. This observation is in line with

Lang and Lundholm (1993), who document a positive correlation between annual report disclosures and other types of company disclosures. The proxy *Disclosure* measures the transparency of compensation disclosure in company annual reports. *Disclosure* incorporates three measures: type, quality, and amount of executive compensation disclosure.

Type of Compensation Disclosure: A company receives 1 point each if it explicitly discloses salary and bonus (*SalaryDisclosure*) and stock and option (*StockDisclosure*) compensation. If the company does not grant any incentive compensation, an explicit statement of this policy warrants the full 2 points for *StockDisclosure*.

Amount of Compensation Disclosure: AmountDisclosure measures the number of disclosed compensation contracts. Companies that merely disclose either average executive pay or the compensation contract of only one executive receive no points; those that disclose two contracts receive 1 point; and those that disclose more than two receive 2 points.

Quality of Compensation Disclosure: QualityDisclosure measures the extent to which a company reveals the following information: (i) overall compensation policy and goals, (ii) pay-setting guidelines for specific positions, (iii) executive compensation in previous years, and (iv) future determinants of executive compensation. Companies that disclose none of the above items receive no points; those that disclose some receive 1 point; and those that disclose all items receive 2 points.

Disclosure sums the measures *SalaryDisclosure*, *StockDisclosure*, *AmountDisclosure*, and *QualityDisclosure*. *Disclosure* takes values between 0 and 6. Note that salary, bonus, stock, and option payments for all 112 companies in the final data set are available and that the above disclosure measures specify the extent to which companies release information about their executive compensation. For example, a *StockDisclosure* of 0 in the final data set would imply

that the company did not disclose any information about its stock grants in that year, but that this information became available in subsequent years. The mean *Disclosure* for the 112 disclosing companies is 4.62 and that for the 46 non-disclosing companies is 1.62. The difference is statistically significant. Also, Table 2 Panel C shows that *Disclosure* exhibits considerable variation across countries, the U.K. being most transparent with a score of 5.81 and Italy the least transparent with a score of 1.54.

I conduct a number of analyses to assess the empirical validity of *Disclosure*. I start by examining the components of *Disclosure*. The disclosure strategies—in this paper, the type, amount, and quality of compensation disclosure—are expected to be coordinated in a company (Botosan, 1997). Thus, I expect positive correlations among the four components of *Disclosure* (i.e., *SalaryDisclosure*, *StockDisclosure*, *AmountDisclosure*, and *QualityDisclosure*). I find that all correlation coefficients among the components are significant and positive. I also compute Cronbach's coefficient alpha, a widely used reliability statistic for latent variables. Coefficient alpha takes values between 0 and 1; the greater the alpha, the more likely that components contribute to a reliable latent variable. The cutoff alpha for an acceptable latent variable, though varying across disciplines, is suggested as 0.70 (Nunnally, 1978). The Cronbach's coefficient alpha for the components of *Disclosure* is 0.73. Moreover, dropping a component from *Disclosure* does not increase the coefficient alpha, which suggests that all components contribute to a reliable *Disclosure* proxy. Using the components of *Disclosure*, I also conduct a factor analysis, which leads to a single factor explaining 46% of the overall component variation. This factor and *Disclosure* are almost perfectly correlated (a coefficient of 0.99). The untabulated tests using this factor instead of *Disclosure* generate similar results to those reported in Section 5.

In my second set of analyses, I examine whether *Disclosure* is associated with company characteristics shown in the literature to be correlated with the general company disclosure. Employing meta-analysis of 29 previous studies, Ahmed and Courtis (1999) identify three factors that are significantly correlated with company disclosure: corporate size, listing status, and leverage. I find that *Disclosure* is positively correlated with the number of listings. However, *Disclosure* is not positively correlated with measures of company size and leverage. I exercise caution in interpreting the results, since *Disclosure* focuses on only one aspect of company disclosure (executive compensation), and not on the general level of company disclosure. Moreover, my data set is comprised of the largest European companies, which do not exhibit universal variability in company financials such as size and leverage. In a separate set of tests, I find that *Disclosure* is positively correlated with the institutional factors of shareholder protection, described in Section 3.5. I conclude that *Disclosure* is a valid proxy for the transparency of compensation disclosure.

3.4. Economic determinants of executive compensation and disclosure

Stock-based Holdings: Executives hold company stocks and options that were granted or purchased in previous years. I define *IncentiveHeld* for each company as the ratio of the average value of stock and option holdings to total annual executive compensation. Stock and option holdings already provide significant incentives to executives (Yermack, 1995; Core et al., 2003). Therefore, I predict that *IncentivePay* will be lower when *IncentiveHeld* is higher.

Level of Compensation: Log(TotalPay) is the natural logarithm of the average executive compensation of a company. I control for the level of compensation in order to draw clear inferences on the relation between board dependence and compensation structures. Executives

demand high levels of compensation to offset the incremental risk they incur related to incentive-based compensation (Core et al., 1999). Therefore, I predict a positive relation between *IncentivePay* and *Log(TotalPay)*.

Company Size: The extant literature predicts that incentive compensation increases with company size (Core et al., 2003). I also expect the transparency of compensation disclosure to increase with company size. *Log(TotalAssets)*, *Log(Sales)*, *Log(MCap)*, and number of employees, *N_Employee*, are proxies for company size.

Company Performance: Company performance increases incentive compensation either because the value of stock-based grants increases with performance or because companies grant greater incentive compensation to reward performance. I also expect transparency of compensation disclosure to increase with performance. The related proxies are annual stock return (*StockReturn*), net income deflated by total assets (*NetIncome*), and operating profit deflated by total assets (*OpProfit*).

Working Capital: Companies with high working capital have more funds readily available for managerial misuse. I expect higher agency costs and incentive compensation for these companies. *WorkingCap* is defined as the working capital deflated by total assets.

Operational Complexity: Companies with complex operations have higher agency costs and greater incentive compensation (Bushman et al., 2004). I use two proxies for operational complexity. *DiverseOperations* is the average of the sales dispersions in product type and location. Sales dispersions for each company are computed as one minus the sum of the squares of the sales fractions in product type and location. DiverseOperations ranges from 0 to 1, a higher value indicating more dispersed sales. *VariableProfit* is the coefficient of variation of a company's operating profit, i.e., the standard deviation of a company's operating profit divided

by its time-series mean. I expect incentive compensation to increase with operational complexity.

Growth Opportunities: Optimal managerial actions are not well defined and agency costs are higher in companies with growth opportunities (Morgan and Poulsen, 2001). Following Core and Guay (2001) and Nagar (2002), I expect to find higher incentive compensation and transparency of compensation disclosure in companies with growth opportunities. The proxies for growth opportunities are market-to-book ratio (*M/B*), research and development costs deflated by total assets (*R&D*), and capital expenditures deflated by total assets (*CAPX*).

Managerial Position: Low-level executives, on average, receive proportionately lower incentive compensation than top executives (Core et al., 2003). Therefore, I expect to find a lower proportion of incentive compensation as *N_Executive*, the number of executives whose contracts are used to compute company averages, increases.

Board Size: Small boards are more effective in monitoring executives and creating value (Yermack, 1996). Therefore, I expect to find lower incentive compensation and less transparent compensation disclosure in companies with a lower number of total directors, *N_Director*.

Cross-Listings: I expect to find higher transparency of compensation disclosure in companies whose shares are listed in a greater number of stock exchanges, denoted by *N_Listed* (Khanna et al., 2004).

Industry: The incentive-based proportion of executive compensation varies across industries (Core et al., 2003). Table 1 identifies nine major industry groups used in the tests.

Year: Many code law companies, traditionally far from common law practices, have recently initiated incentive compensation schemes in response to growing equity culture, securities reforms, and competition in the market for executives (Ferrarini et al., 2003). Therefore, I expect that incentive compensation is more prevalent in 2001 than in 1999.

3.5. International institutional factors

I also capitalize on the international setting of my data set to examine how institutional factors influence the effect of board dependence on executive compensation. Leuz et al. (2003) group countries into three distinct clusters according to their institutional characteristics: i) "outsider economies" with large stock markets, low ownership concentration, high disclosure, extensive outsider rights, and strong legal enforcement (e.g., the U.K.); ii) "insider economies" with small stock markets, high ownership concentration, low company disclosure, but strong law enforcement (e.g., Germany); and, iii) "insider economies" with weak law enforcement (e.g., Italy). The authors find that outside shareholders are protected more strongly in outsider economies than in insider economies, and more in insider economies with strong law enforcement than in those with weak law enforcement.

The contracting and opportunism hypotheses both predict weaker, but still directionally opposite, relations between board dependence and incentive compensation in outsider economies versus insider economies (and similarly in insider economies with strong law enforcement versus those with weak law enforcement), but for different reasons. The contracting hypothesis predicts that strong investor protection through alternative mechanisms reduces the need for incentive compensation. Therefore, the *positive* relation between board dependence and incentive compensation should be less pronounced in outsider economies. On

the other hand, the opportunism hypothesis predicts that the strong investor protection prevents insiders from paying themselves proportionately more in salaries. Therefore, the *negative* relation between board dependence and incentive compensation should be less pronounced in outsider economies.

I use the following institutional factors identified in La Porta et al. (1997, 1998) and Leuz et al. (2003). *Common Law* is a dummy variable that indicates a common law country. The U.K. is the only common law country in the data set. *Legal Enforcement* is a composite measure based on the following variables: (1) efficiency of the judicial system, (2) investors' assessment of the rule of law, and (3) pervasiveness of corruption. *Importance of Equity Market* is a composite measure based on the following variables: (1) aggregate stock market capitalization held by minority shareholders relative to gross national product, (2) number of listed domestic firms relative to population, and (3) number of IPOs relative to population. *Outside Investor Rights* is an aggregate measure of minority shareholder rights. *Country Disclosure* is an average measure of the extent of information disclosure in company reports for each country. Additionally, using my data set, I define an ownership concentration measure, *Block*, which is the sum of the percentage of shares owned by the three largest shareholders of a company. *Block* is available for 156 companies. Table 2 Panel D presents statistics on the above factors across countries.

4. Empirical results: board dependence and incentive compensation

Models 1 to 5 in Table 4 report results of the OLS regressions of *IncentivePay* on different sets of explanatory variables, i.e., board dependence variables, control variables, and industry, year, and country fixed effects. Overall, the results support the contracting hypothesis.

The coefficient on *InsiderRatio* is significantly positive in all models. According to model 5, the ratio of incentive compensation is higher by 0.018 when an executive is on the board of 9 independent directors. The coefficient on *CEO-Chair* is also positive, but loses its significance when country fixed effects are included. *InsiderRatio* and *CEO-Chair* increase the goodness-of-fit from an adjusted R^2 of 35.2% in model 4 to 36.4% in model 5. Moreover, an untabulated regression with an interaction term between *InsiderRatio* and *CEO-Chair* results in a negative coefficient for the interaction term, suggesting that CEO-Chairs and other insiders reduce each other's marginal effect on incentive compensation.

The coefficients on the level of compensation are significant and consistent with the predictions. However, the coefficients on stock-based holdings, company performance, working capital, operational complexity, growth opportunities, managerial position, and board size are insignificant, though consistent in sign with the predictions.

The OLS regressions in models 1 to 5 treat the level of executive compensation as an exogenous variable. However, if the structure and the level of executive compensation are simultaneously determined, the results suffer from the endogeneity bias. For instance, insiders may not be able to draw excessive salaries due to close investor scrutiny, internal restrictions, and unfavorable accounting and tax treatments; hence they may opportunistically choose to pay themselves in the form of excessive stock grants. This argument would predict higher proportions of incentive compensation and greater levels of compensation for companies with dependent boards and thus would bias the OLS coefficients of the above models. I find little evidence supporting this explanation. Table 2 Panel B shows that board dependence is positively correlated with the proportion of incentive compensation, but not with the level of compensation. I also run a 2SLS regression in model 6, using company size and average

compensation levels of a company's industry and country as instruments for the level of compensation. The coefficients on board dependence and level of compensation remain positive. I conclude that the positive relation between board dependence and incentive compensation is not driven by the potential endogeneity between incentive compensation and the level of compensation.

4.1. Insider dominance on the boards

I then examine how the extent of insider dominance affects the relation between board dependence and incentive compensation. Specifically, I inquire whether the contracting hypothesis, valid for the whole sample, holds for companies with insider dominance. According to the opportunism hypothesis, boards with the most influential insiders will be the least likely to make decisions against insiders' preferences. Table 5 divides the data set into four independent groups using two measures of insider dominance. The first measure is the numerical majority of insiders on boards, given arguments that boards are independent only when independent directors compose a numerical majority (Dechow et al., 1996; Klein, 2002). The second measure is the presence of a CEO-Chair. Observations are not equally distributed across the groups: There are 200 firm-year observations with neither an insider majority nor a CEO-Chair, whereas there are only 16 firm-year observations with both an insider majority and a CEO-Chair.

The regression results show that companies with an insider majority and a CEO-Chair do not increase, but rather reduce, the proportion of incentive compensation in response to the effect of insiders. In contrast, the proportion of incentive compensation increases with the proportion of insiders for the companies in other groups. The results suggest that the

contracting hypothesis is valid for the sample as a whole but the opportunism hypothesis cannot be ruled out for companies under intense insider influence.

4.2. Sample selection bias

The above models exclude 46 out of 158 companies examined due to their insufficient disclosure about executive compensation. The non-disclosing companies mostly originate from Germany, France, Switzerland, and Italy, where compensation disclosures were not mandatory between 1999 and 2001. Table 3 Panel B shows that non-disclosing companies do not significantly differ from the disclosing companies in size and market valuation. Coming from code law countries, they have fewer insiders and more blockholding shareholders. My results suffer from sample selection bias if insiders in the non-disclosing companies opportunistically pay themselves proportionately less incentive compensation, and conceal this practice.

While executive compensation of the non-disclosing companies is ultimately unknown, I search for selection bias by assuming different possibilities about the compensation practices of the non-disclosing companies. Table 6 reports the results of this analysis. For comparison purposes, models 1 and 2 present the regression results for the disclosing companies. Models 3 to 6 present the regression results for both the disclosing and non-disclosing companies.

One possible explanation for why companies do not disclose executive compensation is that these companies simply do not grant any incentive compensation. This explanation is reasonable. I observe that some companies start disclosing more transparent compensation information in the year they initiate incentive compensation schemes. Accordingly, model 3 assumes that the non-disclosing companies do not grant any incentive compensation (i.e.,

IncentivePay for each non-disclosing company is 0). The relation between the extent of board dependence and incentive compensation is stronger under this assumption.

Another possible explanation for why companies do not disclose executive compensation is that companies grant incentive compensation but that costs of voluntary disclosures exceed benefits. Accordingly, models 4 and 5 assume that each non-disclosing company pays its executives the same amount and proportion of incentive pay as an average company in its industry and country. The positive relation between board dependence and incentive compensation holds in both models. This finding suggests that if the non-disclosing companies follow the compensation practices of their country and industry, the selection bias does not confound the findings of Table 4.

Finally, model 6 explores the possibility that executive compensation for non-disclosing companies is fully incentive-based (i.e., *IncentivePay* for each non-disclosing company is 1). This possibility is remote (Ferrarini et al., 2003). This assumption works against finding a positive relation between *InsiderRatio* and *IncentivePay*, because the non-disclosing companies have fewer insiders than the disclosing companies. The regression result shows that the goodness-of-fit drops drastically from an adjusted R^2 of 11.6% in model 1 to 3.0%. The coefficient on *InsiderRatio* also becomes insignificant, while the coefficient on *CEO-Chair* becomes 0.06, significant though lower than that in model 1.

I conclude that selection bias does not critically confound the relation between board dependence and incentive compensation. My conclusion is especially sound if i) the non-disclosing companies follow the compensation practices of their country and industry, or ii) net costs of compensation disclosures for the non-disclosing companies do not increase with incentive compensation, contrary to the case in disclosing companies.

4.3. The role of international institutional factors

The international scope of my paper enables me to examine the effect of alternative governance mechanisms on the relation between board dependence and incentive compensation. Table 7 reports results of OLS regressions of *IncentivePay* on international institutional factors, interaction terms between the factors and *InsiderRatio*, and other determinants of executive compensation. The coefficients on the institutional factors of the outsider economies (i.e., *Common Law*, *Importance of Equity Market*, *Outside Investor Rights*, and *Country Disclosure*) are positive, whereas the coefficients on the interaction terms are negative. In contrast, the coefficient on *Block* is negative and the coefficient on the interaction term is positive.

I interpret the findings as follows: companies of outsider economies, where outside shareholder protection is higher, inherently grant greater incentive compensation to their executives than companies of insider economies do. However, companies of outsider economies do not use incentive compensation as extensively to protect against the adverse effects of insiders, possibly because of the presence of alternative control mechanisms. In contrast, companies of insider economies, which are characterized by code law origin and concentrated ownership, grant lower incentive compensation but use incentive compensation in response to insiders more extensively, possibly because of the lack of alternative mechanisms.

4.4. Alternative explanations and sensitivity checks

Endogeneity between Incentive Compensation and Board Dependence

The regression models in Table 4 follow the literature in treating board dependence variables as exogenous (Ryan and Wiggins, 2004; Hermalin and Weisbach, 2003). The

underlying assumption is that board characteristics are determined before executive compensation is set and do not systematically change with executive compensation. However, if executive compensation influences board characteristics, then my results suffer from the endogeneity bias. For instance, ongoing incentive compensation may increase insiders' stake in their companies and make insiders more influential on company boards. I address this caveat with two-stage least squares (2SLS) estimation, using a company's German, English, French, or Scandinavian origin as instruments for the board dependence variables (La Porta et al., 1998). Table 2 Panels C and D favor the choice of instruments. Companies of the same legal origin have similar board structures. For instance, companies of German and Scandinavian origin have few insiders, while companies of English origin have the highest ratio of insiders. At the same time, companies of the same legal origin have diverse compensation practices. Furthermore, unreported first-stage regressions of *InsiderRatio* and *CEO-Chair* on company legal origins result in high goodness-of-fit and significant coefficients.

The unreported 2SLS estimation results in positive coefficients for the board dependence variables. In an alternative 2SLS estimation, I use the presence of two-tier boards as an instrument for board dependence. Two-tier structures are mandated by many code law countries and may better proxy for board dependence than the legal origin variables above. Unreported regression results again show positive coefficients on board dependence variables.

Censored Dependent Variable

IncentivePay is a censored dependent variable ranging from 0 to 1, and ideally requires a Tobit regression. With few observations at the end-points (eleven observations at 0, and a single observation at 1), Tobit regression is not expected to significantly add to the explanatory

power of the OLS regressions (Greene, 2000). Unreported results for interval-censored Tobit regressions are qualitatively similar to those in Table 4.

Black-Scholes Parameters

Company annual reports and the DataStream database fail to report Black-Scholes parameters for 90% of the data set. For missing parameters, I use default values of 4.7% as the risk-free rate, 30% as the stock volatility, 2% as the dividend yield, and 70% of the vesting period as the time-to-expiration. The default values are similar to parameters of the disclosing companies and U.S. averages from the ExecuComp database. Unreported sensitivity checks show that regression coefficients fluctuate by less than 10% in response to ±40% changes on the default values. I conclude that empirical results are not driven by the choice of default values.

Alternative Proxies

The empirical results do not materially change when bonus grants are excluded from *IncentivePay*, or when primary proxies of the economic determinants of incentive compensation are replaced by their alternative proxies defined in Section 3.4.

For analyses across international companies, Wysocki (2004) recommends that empirical variables be deflated by total sales, instead of total assets, due to the cross-country variation in asset recognition rules. The results of the empirical tests with total sales as the deflator are qualitatively the same.

5. Empirical results: board dependence and compensation disclosure

Table 8 reports results of two Tobit models using *Disclosure* as the dependent variable. Model 1, which includes all 158 companies examined, uses board dependence variables and

other economic determinants of disclosure as the explanatory variables. Model 2 excludes the 46 non-disclosing companies and adds *IncentivePay* and *Log(TotalPay)* to the explanatory variables of model 1. Models 1 and 2 are run under three sets of regressions. Set 1 does not include any fixed effects. Set 2 includes industry, year, and country fixed effects. Set 3 excludes board dependence variables to examine the incremental power of the board dependence variables in explaining the transparency of compensation disclosure.

The regression results support the contracting hypothesis. The proportion of insiders on company boards is the main determinant of the transparency of compensation disclosure. The coefficient on *InsiderRatio* is significant but lower for set 2, which uses industry, year, and country fixed effects. This finding suggests that companies in the same country tailor their compensation disclosures according to the extent of insiders on their boards. The findings also show that transparency of compensation disclosure improves with the level of executive compensation and the ratio of incentive compensation. The coefficients on the other control variables usually have the predicted signs, but are not consistent across models.

5.1. Insider dominance on the boards

I then examine how the extent of insider dominance affects the relation between board dependence and the transparency of compensation disclosure. Specifically, I inquire whether the contracting hypothesis, valid for the whole sample, holds for companies with insider-dominated boards. According to the opportunism hypothesis, boards dominated by insiders will be the most reluctant to disclose non-optimal executive compensation. As in Section 4.1., I divide the data set into four independent groups using two measures of insider dominance: the numerical majority of insiders on boards and the presence of a CEO-Chair. Unreported Tobit

results show that the positive relation between the extent of board dependence and transparency of compensation disclosure is significant in all company groups except the one with insider majorities on boards and CEO-Chairs. As in the case for incentive compensation, I conclude that the contracting hypothesis holds for the whole data set, but that opportunism hypothesis cannot be ruled out for companies under intense insider influence.

5.2. The role of international institutional factors

I also examine the effect of alternative governance mechanisms on the transparency of compensation disclosure. Table 9 reports results of Tobit regressions of *Disclosure* on international institutional factors and other determinants of compensation disclosure. The institutional factors of outsider economies as well as *Legal Enforcement* are positively correlated with the transparency of compensation disclosure. In contrast, *Block*, which is related to insider economies, is negatively correlated with the transparency of compensation disclosure. The findings suggest that companies of outsider economies disclose executive compensation more transparently, whereas institutional investors in insider economies create or invest in companies disclosing less transparent information about compensation.

Unreported Tobit regressions, which include interaction terms between institutional factors and *InsiderRatio*, result in insignificant coefficients on the interaction terms. This finding suggests that alternative control mechanisms influence the transparency of compensation disclosure, but do not significantly affect the positive relation between board dependence and the transparency of compensation disclosure.

5.3. Sensitivity Checks and Alternative Explanations

Model Specification

Tobit regressions treating *Disclosure* as a cardinal variable may result in spurious coefficients, since *Disclosure* is constructed as an ordinal variable. I address this caveat by using two separate checks. First, non-parametric Spearman and Kendall tests yield a significant positive correlation between *InsiderRatio* and *Disclosure*. Second, decile rank regressions again yield significantly positive coefficients on *InsiderRatio*. I conclude that the positive relations between board dependence and transparency of compensation disclosure in Tables 8 and 9 are not spuriously driven by the choice of the Tobit regression.

In another set of tests, I control for the self-selection bias by using the Heckman procedure. I divide *Disclosure* into two components. The first component indicates the decision to disclose, measured by *SalaryDisclosure* and *StockDisclosure*. The second component is the extent of disclosure, measured by *AmountDisclosure* and *QualityDisclosure*. The unreported Heckman tests show that the proportion of insiders is influential in both the decision to disclose and the transparency of compensation disclosure.

Correlated omitted variables

I run a Tobit regression with company fixed effects to filter out the effect of correlated variables, which may be omitted by the Tobit models in Table 8. Unreported results show that both *InsiderRatio* and *IncentivePay* continue to be the predominant explanatory variables for the transparency of compensation disclosure. I conclude that the empirical positive relation between board dependence and the transparency of compensation disclosure is unlikely to result from omitted company-specific factors.

Alternative Proxies

Unreported test results are insensitive to the alternative proxies of the economic determinants of disclosure defined in Section 3.4. Deflation of the empirical variables by total sales instead of total assets, as suggested by Wysocki (2004), also does not materially change the test results. In addition, when *N_Listed* is replaced by *USListed*, the proxy for listing in U.S. markets, the coefficient on *USListed* is positive and significant. This finding supports the argument that the total number of listings and being listed in the U.S. both increase transparency of compensation disclosure.

6. Summary and conclusions

I provide international evidence concerning the effect of dependent boards on executive compensation and the related disclosures. My motivation for this study is twofold. First, I attempt to shed light on the controversy in the literature over whether companies can adopt in-house measures against governance inefficiencies. Second, I examine the effect of international institutional factors on the relation between board independence and executive compensation. To this end, I hand-collect official compensation data across European companies with varying institutional factors, including the structure and disclosure of executive compensation. This method, to my knowledge, is rare in international governance studies, which mostly rely on survey results and country averages (Conyon and Schwalbach, 1999).

My findings show that companies with more dependent boards (i.e., companies with more insiders on their boards and companies with CEOs serving as board chairs) grant their executives greater incentive compensation, after controlling for the level of compensation and other determinants of incentive compensation. Moreover, companies with more dependent

boards disclose more transparent information about executive compensation. The overall evidence is consistent with the contracting hypothesis, indicating that companies either adopt or reinforce alternative governance mechanisms when they lack an important one (independent board monitoring).

However, the effect of dependent boards on incentive compensation is not uniform across observations. Board dependence results in a greater proportion of incentive compensation only when insiders do not dominate the boards (i.e., when insiders do not form a numerical majority on the board or when the CEO does not serve as the board chair.) Furthermore, the effect of board dependence on incentive compensation is more pronounced when alternative mechanisms for outside shareholder protection do not exist or are less effective, as in insider economies versus outsider economies.

The sensitivity analyses above provide a general picture of the substitutability of alternative governance mechanisms in an international setting. By induction, these analyses imply that the positive relation between board dependence and incentive compensation would at least be less pronounced for U.S. companies, where insiders are more influential on boards and several alternative mechanisms for outside shareholder protection exist. The few empirical studies using U.S. companies support this prediction: dependent boards in the U.S. result in less incentive compensation, not only for executives (Mehran, 1995) but also for independent board directors (Ryan and Wiggins, 2004).

My results indicate that companies, on average, take actions to offset governance inefficiencies. However, my results do not necessarily imply that these actions fully address the governance inefficiencies or that the recent regulatory trend promoting board independence and more transparent disclosures is redundant. As one example of such regulatory changes, the

European Commission is moving towards mandating more transparent disclosures of executive compensation (Karp and Wallmeyer, 2004). An interesting future study in this context might compare characteristics of companies that voluntarily resort to more transparent disclosures versus those that change their disclosures as a result of regulatory requirements. I believe that the ever-increasing trend toward more transparent disclosures will reveal more about such dynamics of corporate governance, and make possible promising studies that require less concern for the types of empirical caveats stated in this paper.

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Table 1 Panel A - Sample selection

	Companies	%
Initial sample from the 'Forbes 2000 Top 800 International Companies' list	165	100%
Less: Repetitions of companies with double headquarters	(4)	(2%)
Less: Regulatory institutions	(1)	(1%)
Less: Mergers after year 2000	(1)	(1%)
Less: Bankruptcies after year 2000	(1)	(1%)
Companies examined	158	95%
Less: Companies with insufficient disclosure (Non-disclosing companies)	(46)	(28%)
Final sample (Disclosing companies)	112	67%

Panel B - Country breakdown of the data set

Country	Companies examined	Non-disclosing companies	Final sample
UK	43	1	42
France	33	12	21
Germany	27	11	16
Holland	11	1	10
Switzerland	11	5	6
Sweden	6	1	5
Italy	9	5	4
Spain	6	3	3
Belgium	5	2	3
Finland	3	1	2
Russia	3	3	0
Norway	1	1	0
	158	46	112

Panel C - Industry breakdown of the data set

Industry	Companies examined	Non-disclosing companies	Final sample
Finance, insurance, real estate	42	12	30
Machinery and electronics	23	3	20
Wholesale and retail trade	22	4	18
Chemical, petroleum, glass	27	9	18
Transportation, utilities	19	8	11
Primary and fabricated metal	7	3	4
Food and tobacco	4	0	4
Services	4	1	3
Mining and construction	5	3	2
Textile, wood, paper	5	3	2
	158	46	112

Table 2 Panel A - Descriptive statistics for the final sample

	Mean	Min	Q1	Median	Q3	Max	Std Dev
Board Structure							
N_IndDirector	4.07	0	0	0	8	18	4.73
N_ExecDirector	3.22	0	0	3	6	11	2.97
N_EmplDirector	1.56	0	0	0	1	11	3.12
N_OtherDirector	4.88	0	0	5	9	24	4.97
N_Director	13.72	4	11	13	16	26	4.39
InsiderMajority	0.15	0	0	0	0	1	0.35
InsiderRatio	0.25	0.00	0.00	0.20	0.44	0.80	0.22
CEO-Chair	0.31	0	0	0	1	1	0.46
Executive Compensation							
N_Executive	8	1	5	5	9	60	8
Salary (`000 €)	794	0	449	633	930	6,420	677
Bonus (`000 €)	312	0	18	213	436	4,537	440
Stock (`000 €)	180	0	0	0	58	4,227	510
Option (`000 €)	696	0	45	228	572	29,505	2,007
TotalPay (`000 €)	1,982	81	877	1,398	2,184	32,747	2,483
StockHeld (`000 €)	2,291	0	0	100	733	165,250	14,960
OptionHeld (`000 €)	1,617	0	94	476	1,591	21,795	3,156
Log(TotalPay)	7.25	4.39	6.78	7.24	7.69	10.40	0.79
IncentivePay	0.48	0.00	0.31	0.52	0.67	1.00	0.24
IncentiveHeld	3.23	0.00	0.21	0.72	1.61	294.59	20.94
Compensation Disclosure							
SalaryDisclosure	0.98	0	1	1	1	1	0.14
StockDisclosure	0.91	0	1	1	1	1	0.29
AmountDisclosure	1.26	0	0	2	2	2	0.86
QualityDisclosure	1.48	0	1	2	2	2	0.70
Disclosure	4.62	0	4	5	6	6	1.54

The final sample consists of 336 firm-year observations across 112 European companies for the years 1999 to 2001.

Board Structure

N_IndDirector is the number of independent directors. **N_ExecDirector** is the number of directors who also serve as company executives. **N_EmplDirector** is the number of directors who are employees but not executives. **N_OtherDirector** is the number of non-employee directors who are not classified as independent. **N_Director** is the total number of directors. **InsiderMajority** is a dummy variable equal to 1 if executives compose a numerical majority on the board and 0 otherwise. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise.

Executive Compensation

N_Executive is the number of executives used to compute company averages about executive compensation for each company. **Salary** is the average annual fixed compensation per manager. **Bonus** is the average annual bonus compensation per manager. **Stock** is the average value of annual stock grants, calculated as the number of shares granted times the annual average stock price, per manager. **Option** is the average Black-Scholes value of annual option grants per manager. **TotalPay** is the total annual compensation per manager for each company. It is the sum of Salary, Bonus, Stock, and Option. **StockHeld** and **OptionHeld** are respective average values of stocks and options held per manager for

each company at the beginning of the fiscal year. **Log(TotalPay)** is the natural logarithm of TotalPay. **IncentivePay** is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. It is the ratio of the sum of Bonus, Stock, and Option to TotalPay. **IncentiveHeld** is the ratio of the sum of StockHeld and OptionHeld to TotalPay for each company.

Compensation Disclosure

SalaryDisclosure is a dummy variable equal to 1 if a company discloses its salary and bonus compensation and 0 otherwise. **StockDisclosure** is a dummy variable equal to 1 if a company discloses its stock and option compensation and 0 otherwise. **AmountDisclosure** measures the number of disclosed compensation contracts. It takes numerical values of zero, one, and two, a higher value indicating a higher number of disclosed contracts. **QualityDisclosure** measures disclosure quality. It takes numerical values of zero, one, and two, a higher value indicating higher disclosure quality. **Disclosure** is the overall measure for the type, amount, and quality of executive compensation disclosure. Disclosure is the sum of CashDisclosure, StockDisclosure, QualityDisclosure, and AmountDisclosure, and ranges from zero to six. A higher value for Disclosure indicates more transparent disclosure of executive compensation.

Table 2 Panel A, continued - Descriptive statistics for the final sample

	Mean	Min	Q1	Median	Q3	Max	Std Dev
Economic Determinants of Executive Compensation							
TotalAssets (mn €)	121,618	1,933	12,342	35,289	138,942	911,926	185,413
Sales (mn €)	28,706	3,010	12,163	21,270	37,664	200,514	24,789
MCap (mn €)	35,200	437	9,176	18,809	44,553	361,823	44,155
WorkingCap (mn €)	139	-174,805	-2,519	280	3,021	348,900	39,588
R&D (mn €)	570	0	0	31	555	6,000	1,054
OpProfit (mn €)	2,940	-14,436	637	1,415	3,488	35,382	5,360
NetIncome (mn €)	1,604	-14,653	359	955	2,360	17,979	2,825
CAPX (mn €)	1,501	-647	0	557	1,717	16,300	2,509
Log(TotalAssets)	10.66	7.57	9.42	10.47	11.84	13.72	1.47
Log(Sales)	9.98	8.01	9.41	9.97	10.54	12.21	0.74
Log(MCap)	9.85	6.08	9.12	9.84	10.70	12.80	1.17
WorkingCap	0.03	-0.40	-0.07	0.01	0.10	0.42	0.14
R&D	0.02	0.00	0.00	0.00	0.02	0.85	0.07
OpProfit	0.05	-0.72	0.01	0.05	0.09	0.30	0.07
NetIncome	0.04	-0.22	0.01	0.03	0.05	1.93	0.11
CAPX	0.05	-0.07	0.00	0.04	0.07	0.34	0.05
M/B	3.22	-37.27	1.53	2.43	3.69	43.70	5.44
StockReturn	0.06	-0.94	-0.20	-0.02	0.19	7.41	0.60
DiverseOperations	0.56	0.04	0.44	0.61	0.69	0.83	0.18
VariableProfit	0.96	0.02	0.14	0.29	0.63	35.80	3.50
N_Listed	2.21	1	1	2	4	5	1.26
USListed	0.76	0	1	1	1	1	0.43
Block	0.23	0.00	0.08	0.20	0.30	0.89	0.17
N_Employee	103,488	4,111	46,212	75,772	120,490	680,000	94,228

Economic Determinants of Executive Compensation
The variables of the first group are reported in million €'s. The variables of the second group are computed as either the natural logarithms of the variables in the first group (reported with the prefix 'Log') or as the variables in the first group deflated by company total assets (reported with no prefix). The empirical tests in this paper use the variables in the second group. Other economic determinants of executive compensation used in the empirical tests are reported in the third group.
TotalAssets is the total assets at the fiscal year end. **Sales** are total net sales. **MCap** is the market capitalization of equity at the fiscal year end. **WorkingCap** is the working capital, calculated as the difference between current assets and current liabilities. **R&D** is research and development expenses. **OpProfit** is the net operating profit. **NetIncome** is the net income. **CAPX** is the capital expenditures. **M/B** is market value of equity divided by book value of equity at the fiscal year end. **StockReturn** is the annual stock return in the primary stock exchange where the company shares are traded. **DiverseOperations** is the average of sales dispersions in product type and location, which are calculated using the Herfindahl-Hirschman method. A high value of DiverseOperations indicates that company sales are dispersed in terms of product type and location. **VariableProfit** is the coefficient of variation of a company's operating profit. It is the standard deviation of the company's operating profit divided by its time-series mean. **N_Listed** is the total number of stock exchanges on which a company's shares are listed. **USListed** is a dummy variable equal to 1 if a company's shares are listed as ADR or OTC in the U.S. and 0 otherwise. **Block** is the sum of the percentages of the shares owned by the largest three shareholders. Block is available for 156 observations. **N_Employee** is the number of employees.

Table 2 Panel B - Correlation table

Pearson correlation coefficients and p values (in parentheses) are presented below for the final sample, which consists of 336 annual observations from the 112 disclosing companies. Table 2 Panels A and D present the variable definitions.

	Disclosure	Insider Ratio	CEO-Chair	Incentive Held	Log (Total Pay)	Log (Total Assets)	M/B	Net Income	Legal Enforcement	Importance of Equity Market
IncentivePay	0.27	0.15	0.18	-0.03	0.49	0.15	0.07	0.06	-0.12	0.11
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.19)	(0.30)	(0.02)	(0.04)
Disclosure		0.56	0.08	0.11	0.14	-0.12	0.05	0.10	0.20	0.64
		(0.00)	(0.16)	(0.05)	(0.01)	(0.02)	(0.03)	(0.06)	(0.00)	(0.00)
InsiderRatio			0.17	0.14	0.02	-0.22	-0.03	0.08	-0.17	0.53
			(0.00)	(0.01)	(0.70)	(0.00)	(0.59)	(0.13)	(0.00)	(0.00)
CEO-Chair				-0.04	0.05	-0.06	-0.08	-0.01	-0.16	-0.08
				(0.52)	(0.37)	(0.31)	(0.15)	(0.83)	(0.00)	(0.12)
IncentiveHeld					-0.09	-0.14	0.02	0.02	0.02	0.11
					(0.08)	(0.01)	(0.72)	(0.74)	(0.65)	(0.05)
Log(TotalPay)						0.30	0.08	0.04	0.06	0.16
						(0.00)	(0.14)	(0.43)	(0.27)	(0.00)
Log(TotalAssets)							-0.04	-0.18	-0.03	-0.07
							(0.51)	(0.00)	(0.57)	(0.19)
M/B								0.11	0.12	0.07
								(0.04)	(0.03)	(0.23)
NetIncome									0.03	0.11
									(0.54)	(0.04)
Legal Enforcement										0.48
										(0.00)

Table 2 Panel C - The breakdown of selected variables according to countries

Country	Insider Ratio	CEO-Chair	Salary (`000 €)	Bonus (`000 €)	Stock (`000 €)	Option (`000 €)	TotalPay (`000 €)	Incentive Pay	Incentive Held	Disclosure
UK	0.45	0.23	751	379	354	411	1,895	0.50	6.51	5.81
France	0.21	0.79	568	363	0	1,096	2,027	0.59	1.71	3.27
Germany	0.00	0.00	977	214	25	201	1,417	0.30	0.07	2.59
Holland	0.10	0.13	888	358	52	607	1,905	0.50	1.65	4.97
Switzerland	0.09	0.50	1,968	281	309	2,429	4,987	0.53	1.61	2.27
Sweden	0.05	0.07	428	109	0	135	672	0.38	0.74	3.83
Italy	0.34	0.00	577	179	592	1,955	3,302	0.67	0.26	1.54
Spain	0.25	0.67	562	285	45	375	1,268	0.45	0.69	2.39
Belgium	0.19	0.11	624	95	0	107	827	0.22	0.11	2.13
Finland	0.15	0.50	592	173	0	1,901	2,666	0.54	8.91	4.67

The country averages are calculated using 112 disclosing companies for all financial variables except Disclosure, for which all 158 companies examined are used. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise. **Salary** is the average annual fixed compensation per manager. **Bonus** is the average annual bonus compensation per manager. **Stock** is the average value of annual stock grants per manager. **Option** is the average Black-Scholes value of annual option grants per manager. **TotalPay** is the total annual compensation per manager for each company. It is the sum of Salary, Bonus, Stock, and Option. All compensation data are in thousand €'s. **IncentivePay** is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. **IncentiveHeld** is the ratio of the value of stocks and options held to total annual compensation per manager for each company. **Disclosure** is the overall measure for the type, amount, and quality of executive compensation disclosure. A higher value for Disclosure indicates more transparent disclosure of executive compensation.

Table 2 Panel D - Descriptive statistics for the international institutional characteristics

Country	Legal Origin	Legal Tradition	Importance of Equity Market	Outside Investor Rights	Country Disclosure	Legal Enforcement	Ownership Concentration	Block
UK	English	Common (Outsider)	25.0	5	78	9.2	0.15	0.13
France	French	Code (Insider)	9.3	3	69	8.7	0.24	0.24
Germany	German	Code (Insider)	5.0	1	62	9.1	0.50	0.31
Holland	French	Code (Insider)	19.3	2	64	10.0	0.31	0.34
Switzerland	German	Code (Insider)	24.8	2	68	10.0	0.48	0.06
Sweden	Scandinavian	Code (Insider)	16.7	3	83	10.0	0.28	0.16
Italy	French	Code (Insider)	6.5	1	62	7.1	0.60	0.33
Spain	French	Code (Insider)	7.2	4	64	7.1	0.50	0.26
Belgium	French	Code (Insider)	11.3	0	61	9.4	0.62	0.29
Finland	Scandinavian	Code (Insider)	13.7	3	77	10.0	0.34	0.05

Legal Origin and **Legal Tradition** are classified in La Porta et al. (1998) and Leuz et al. (2003). The **Importance of Equity Market** is measured by the mean rank across three variables in La Porta et al. (1997): (1) the ratio of aggregate stock market capitalization held by minorities to gross national product, (2) the number of listed domestic firms relative to population, and (3) the number of IPOs relative to population. High scores for each variable indicate a greater importance of the equity markets. The Importance of Equity Market is taken from Leuz et al. (2003). **Outside Investor Rights** is the anti-director rights index in La Porta et al. (1998). It is an aggregate measure of minority shareholder rights and ranges from zero to five. **Country Disclosure** is the disclosure index in La Porta et al. (1998), which measures the inclusion or omission of 90 items in the 1990 annual reports. **Legal Enforcement** is the mean of the three legal variables in La Porta et al. (1998): (1) the efficiency of the judicial system, (2) the assessment of the rule of law, and (3) the corruption index. Legal Enforcement ranges from zero to ten. **Ownership Concentration** is the median percentage of common shares owned by the largest three shareholders of the ten largest privately owned non-financial firms (La Porta et al., 1998). **Block** is the sum of the percentages of the shares owned by the largest three shareholders. Block is available for 156 observations only. Ownership Concentration and Block are significantly correlated, with a correlation coefficient of 0.40.

Table 3 Panel A - Descriptive statistics for top U.S. companies

	Mean	Min	Q1	Median	Q3	Max	Std Dev
Board Dependence							
N_Director	10.50	1.00	8.00	10.00	12.00	39.00	3.40
InsiderRatio	0.24	0.00	0.13	0.20	0.30	1.00	0.14
CEO-Chair	0.81	0.00	1.00	1.00	1.00	1.00	0.39
Executive Compensation							
Salary (`000 €)	1,025	260	627	761	1,028	16,005	1,168
Bonus (`000 €)	1,616	-303	432	879	1,708	15,021	2,182
Stock (`000 €)	925	0	0	29	831	19,090	2,174
Option (`000 €)	4,847	0	1,015	2,494	5,673	65,315	7,439
TotalPay (`000 €)	8,412	260	2,878	5,271	9,782	66,766	9,299
StockHeld (`000 €)	247,751	0	4,043	11,143	38,565	13,251,469	1,424,816
OptionHeld (`000 €)	22,856	0	1,247	6,325	21,109	981,136	60,840
IncentiveHeld	32.21	0.00	0.52	1.45	5.01	1,720	185.03
IncentivePay	0.79	0.00	0.72	0.83	0.90	0.99	0.17
N_Executive	5.43	3.00	5.00	5.00	6.00	9.00	0.80
Financials							
TotalAssets (mn €)	76,956	2,747	13,513	24,030	52,150	1,051,450	140,370
NetIncome (mn €)	1,769	-16,198	302	939	2,309	17,720	2,858
MCap (mn €)	50,729	366	8,636	20,498	59,194	507,217	76,081

The panel presents descriptive statistics for the top U.S. companies. N_Director and InsiderRatio are obtained from Perry (1999), who examines 871 companies covered by the IRRC and the ExecuComp database for year 1995. The rest of the data are obtained from the ExecuComp database for the largest 150 U.S. companies for the years 1999 to 2001. Table 2 Panel A presents the variable definitions.

Table 3 Panel B - Descriptive statistics for the non-disclosing companies

	Mean	Min	Q1	Median	Q3	Max	Std Dev
Board Dependence							
N_Director	16.7	6.00	12.00	16.00	21.00	39.00	7.12
InsiderRatio	0.17	0.00	0.00	0.08	0.31	1.00	0.23
CEO-Chair	0.28	0.00	0.00	0.00	1.00	1.00	0.46
Disclosure							
Disclosure	1.61	0.00	1.00	1.00	3.00	3.00	1.18
Financials							
TotalAssets (mn €)	109,641	3,121	13,345	23,324	145,317	940,033	178,896
WorkingCap (mn €)	-4,894	-152,233	-1,646	500	2,129	42,130	26,341
NetIncome (mn €)	817	-13,600	241	553	1,285	10,164	2,204
N_Employee	90,786	1,340	37,575	64,737	107,571	467,000	86,609
M/B	2.80	0.12	1.32	2.02	3.11	23.14	2.87
StockReturn	0.05	-0.75	-0.18	-0.04	0.19	2.12	0.41
Governance							
N_Listed	2.11	1.00	1.00	1.00	3.00	5.00	1.30
Block	0.44	0.00	0.18	0.41	0.67	0.96	0.28

The panel presents descriptive statistics for the 46 non-disclosing companies out of the 158 companies examined for the years 1999 to 2001. The number of observations for all variables is 138, except for Block with 30 available observations. Table 2 Panel A presents the variable definitions.

Table 4 - Incentive compensation and dependent boards

	Predicted Sign	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6 – 2SLS –
Constant		0.42	-0.59	0.34	-0.45	-0.87	-0.66
		(18.6)	(-3.32)	(2.17)	(-2.14)	(-6.43)	(-1.96)
InsiderRatio	+	0.13	0.17	0.18		0.18	0.19
		(2.25)	(2.75)	(1.83)		(2.52)	(2.80)
CEO-Chair	+	0.09	0.09	0.02		0.02	0.01
		(3.07)	(3.79)	(0.67)		(0.77)	(0.30)
IncentiveHeld	-		0.00		0.00	0.00	0.00
			(0.76)		(0.48)	(0.26)	(0.51)
Log(TotalPay)	+		0.14		0.15	0.15	0.20
			(5.62)		(5.47)	(6.60)	(2.43)
Log(TotalAssets)	+		-0.00		-0.01	0.02	-0.02
			(-0.08)		(-0.36)	(1.48)	(-0.72)
StockReturn	+		0.02		0.02	0.01	0.02
			(1.86)		(1.41)	(0.78)	(1.41)
NetIncome	+		0.06		0.10	0.08	0.09
			(1.00)		(1.19)	(0.94)	(1.13)
WorkingCap	+		0.08		0.13	0.14	0.15
			(0.71)		(1.23)	(1.34)	(1.30)
DiverseOperations	+		0.02		-0.03	0.05	-0.05
			(0.27)		(-0.36)	(0.75)	(-0.47)
M/B	+		0.00		0.00	0.00	0.00
			(1.14)		(0.93)	(1.05)	(0.90)
N_Executive	-		-0.00		-0.00	-0.00	-0.00
			(-0.55)		(-0.90)	(-0.70)	(-0.70)
N_Director	-		-0.00		-0.00	-0.00	-0.00
			(-0.61)		(-0.52)	(-0.75)	(-0.24)
Industry, year fixed effects		No	Yes	Yes	Yes	Yes	Yes
Country fixed effects		No	No	Yes	Yes	Yes	Yes
Adjusted R^2		4.7%	32.7%	20.6%	35.2%	36.4%	36.5%
Number of observations		336	336	336	336	336	336

The table presents coefficients and two-tailed t-values (in parentheses) from regressions with IncentivePay as the dependent variable. The data set comprises three annual observations for the years 1999 to 2001 for the 112 disclosing companies. **Models 1** to **5** present OLS regressions with or without board dependence variables, control variables, and industry, year, and country fixed effects. The t-values are adjusted for the within-company dependence of the annual observations. Industry, year, and country coefficients are omitted for brevity. **Model 6** is a regression using two-stage least squares to control for the potential endogeneity between incentive compensation and the level of compensation. The instrumental variables are company size, Log(TotalAssets), and the average level of pay in the company's industry and country.

IncentivePay is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise. **IncentiveHeld** is the ratio of the value of stocks and options held to total annual compensation per manager for each company. **Log(TotalPay)** is the natural logarithm of

total annual compensation per manager. **Log(TotalAssets)** is the natural logarithm of the total assets at the fiscal year end. **StockReturn** is the annual stock return in the primary stock exchange where the company shares are traded. **NetIncome** is the net income deflated by total assets. **WorkingCap** is the working capital, computed as the difference between current assets and current liabilities, deflated by total assets. **DiverseOperations** is the average of sales dispersions in product type and location, with a higher value indicating more dispersed sales in terms of product type and location. **M/B** is market value of equity divided by book value of equity at the end of the fiscal year. **N_Executive** is the number of executives used to compute averages about executive compensation for each company. **N_Director** is the total number of directors.

Table 5 - The effect of insider dominance on the relation between incentive compensation and dependent boards

	CEO-Chair = 0	CEO-Chair = 1	Total Sample
InsiderMajority=0			
Coefficient for InsiderRatio	0.25	0.38	0.34
	(2.72)	(2.20)	(3.80)
Adjusted R^2	22.8%	44.7%	39.1%
Number of observations	200	87	287
InsiderMajority=1			
Coefficient for InsiderRatio	1.36	-0.73	0.30
	(1.59)	(-1.82)	(0.75)
Adjusted R^2	74.8%	91.5%	88.7%
Number of observations	33	16	49
Total Sample			
Coefficient for InsiderRatio	0.22	0.05	0.20
	(3.26)	(0.40)	(2.90)
Adjusted R^2	41.5%	60.6%	39.2%
Number of observations	233	103	336

The table presents the coefficients for InsiderRatio and two-tailed t-values (in parentheses) from OLS regressions with IncentivePay as the dependent variable. The data set is split according to the presence of i) a numerical majority of executives on the board and ii) a CEO-Chair. IncentivePay is regressed on InsiderRatio and the economic determinants of executive compensation for each group of companies.

IncentivePay = f (InsiderRatio, IncentiveHeld, Log(TotalPay), Log(TotalAssets), StockReturn, NetIncome, WorkingCap, DiverseOperations, M/B, N_Executive, N_Director)

The coefficients for the other determinants of IncentivePay are omitted for brevity. The t-values are adjusted for the within-company dependence of the annual observations.
InsiderMajority is a dummy variable equal to 1 if executives compose a numerical majority on the board and 0 otherwise. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise. **IncentivePay** is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **IncentiveHeld** is the ratio of the value of stocks and options held to total annual compensation per manager for each company. **Log(TotalPay)** is the natural logarithm of total annual compensation per manager. **Log(TotalAssets)** is the natural logarithm of the total assets at the fiscal year end. **StockReturn** is the annual stock return in the primary stock exchange where the company shares are traded. **NetIncome** is the net income deflated by total assets. **WorkingCap** is the working capital, computed as the difference between current assets and current liabilities, deflated by total assets. **DiverseOperations** is the average of sales dispersions in product type and location, with a higher value indicating more dispersed sales in terms of product type and location. **M/B** is market value of equity divided by book value of equity at the end of the fiscal year. **N_Executive** is the number of executives used to compute averages about executive compensation for each company. **N_Director** is the total number of directors.

Table 6 - Sample selection bias

	Predicted Sign	Disclosing companies (1)	(2)	All companies (3)	(4)	(5)	(6)
Constant		0.06	-0.72	-0.06	0.14	-0.66	0.44
		(0.59)	(-5.62)	(-0.61)	(1.88)	(-5.87)	(3.75)
InsiderRatio	+	0.17	0.15	0.22	0.13	0.13	-0.05
		(2.77)	(2.48)	(3.35)	(3.05)	(3.27)	(-0.74)
CEO-Chair	+	0.10	0.08	0.07	0.08	0.07	0.06
		(3.65)	(3.38)	(2.36)	(3.91)	(3.86)	(2.14)
IncentiveHeld	-		0.00			0.00	
			(0.02)			(0.13)	
Log(TotalPay)	+		0.14			0.14	
			(6.66)			(7.32)	
Log(TotalAssets)	+	0.04	0.01	0.05	0.03	0.01	0.01
		(4.33)	(1.12)	(5.41)	(4.37)	(1.41)	(0.61)
StockReturn	+	0.01	0.02	0.01	0.01	0.02	0.00
		(0.92)	(1.50)	(0.62)	(0.76)	(1.42)	(0.15)
NetIncome	+	0.12	0.05	0.20	0.12	0.06	0.05
		(1.40)	(0.87)	(1.70)	(1.47)	(1.08)	(0.60)
WorkingCap	+	0.14	0.13	0.12	0.10	0.09	0.05
		(1.32)	(1.35)	(1.22)	(1.32)	(1.29)	(0.38)
M/B	+	0.00	0.00	0.01	0.00	0.00	0.00
		(1.52	(1.00)	(1.99)	(1.73)	(1.16)	(0.59)
N_Director	-	-0.01	-0.00	-0.02	-0.01	-0.00	0.01
		(-2.58)	(-1.00)	(-6.50)	(-3.31)	(-1.99)	(2.69)
Adjusted R^2		11.6%	29.3%	14.5%	10.6%	29.2%	3.0%
Number of observations		336	336	474	474	474	474

The table presents coefficients and two-tailed t-values (in parentheses) from the OLS regressions with IncentivePay as the dependent variable. The t-values are adjusted for the within-company dependence of the annual observations. **Models 1** and **2** present regressions using three annual observations from the 112 companies disclosing executive compensation. **Models 3** to **6** present regressions using three annual observations from the 158 companies with available or missing compensation data. The missing data on IncentivePay, IncentiveHeld, and Log(TotalPay) for the 46 non-disclosing companies are assigned different values for each model. In **model 3**, IncentivePay for each non-disclosing company is assumed to be 0. In **models 4** and **5**, the missing compensation data for each company are assumed to be the average of the following two variables: i) average compensation of companies sharing the same industry, and ii) average compensation of companies sharing the same country. In **model 6**, IncentivePay for each non-disclosing company is assumed to be 1.

IncentivePay is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise. **IncentiveHeld** is the ratio of the value of stocks and options held to total annual compensation per manager for each company. **Log(TotalPay)** is the natural logarithm of total annual compensation per manager. **Log(TotalAssets)** is the natural logarithm of the total assets at the fiscal year end. **StockReturn** is the annual stock return in the primary stock exchange where the company shares are traded. **NetIncome** is the net income deflated by total assets. **WorkingCap** is the working capital, computed as the difference between current assets and current liabilities, deflated by total assets. **M/B** is market value of equity divided by book value of equity at the end of the fiscal year. **N_Director** is the total number of directors.

Table 7 - The effect of international institutional factors on the relation between incentive compensation and dependent boards

	Institutional Factors					
	Common Law	Importance of Equity Market	Outside Investor Rights	Country Disclosure	Legal Enforcement	Block
InsiderRatio	0.26	0.56	0.59	1.92	0.82	0.10
	(2.82)	(4.00)	(3.83)	(2.76)	(1.24)	(0.79)
CEO-Chair	0.06	0.05	0.04	0.06	0.07	-0.02
	(2.47)	(2.12)	(1.78)	(2.46)	(3.02)	(-0.55)
Institutional Factor	0.10	0.00	0.08	0.01	-0.04	-0.25
	(1.45)	(1.32)	(4.66)	(3.07)	(-1.27)	(-1.53)
InsiderRatio*	-0.31	-0.02	-0.18	-0.03	-0.07	0.89
Institutional Factor	(-1.95)	(-2.78)	(-4.16)	(-2.65)	(-1.04)	(2.18)
Adjusted R^2	30.3%	31.2%	34.3%	32.2%	31.7%	33.2%
No. of observations	336	336	336	336	336	156

The table presents coefficients and two-tailed t-values (in parentheses) from the OLS regressions with IncentivePay as the dependent variable. The regression model for each column includes an institutional factor, which is indicated at the top of the column, and an interaction term between InsiderRatio and that institutional factor.

IncentivePay = f (InsiderRatio, CEO-Chair, Institutional Factor, InsiderRatio Institutional Factor, IncentiveHeld, Log(TotalPay), Log(TotalAssets), StockReturn, NetIncome, WorkingCap, DiverseOperations, M/B, N_Executive, N_Director).*

The coefficients for the economic determinants of IncentivePay are omitted for brevity. The t-values are adjusted for the within-country dependence of the observations.

IncentivePay is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise. **IncentiveHeld** is the ratio of the value of stocks and options held to total annual compensation per manager for each company. **Log(TotalPay)** is the natural logarithm of total annual compensation per manager. **Log(TotalAssets)** is the natural logarithm of the total assets at the fiscal year end. **StockReturn** is the annual stock return in the primary stock exchange where the company shares are traded. **NetIncome** is the net income deflated by total assets. **WorkingCap** is the working capital, calculated as the difference between current assets and current liabilities, deflated by total assets. **DiverseOperations** is the average of sales dispersions in product type and location, with a higher value indicating more dispersed sales in terms of product type and location. **M/B** is market value of equity divided by book value of equity at the end of the fiscal year. **N_Executive** is the number of executives used to compute averages about executive compensation for each company. **N_Director** is the total number of directors.

The institutional factors are defined next. **Common Law** is the dummy variable for the common law country (the U.K.) as in La Porta et al. (1998). **Importance of Equity Market** is measured by the mean rank across three variables in La Porta et al. (1997): (1) the ratio of the aggregate stock market

capitalization held by minorities to gross national product, (2) the number of listed domestic firms relative to the population, and (3) the number of IPOs relative to the population. Importance of Equity Market is taken from Leuz et al. (2003). **Outside Investor Rights** is the anti-director rights index in La Porta et al. (1998). It is an aggregate measure of minority shareholder rights. **Country Disclosure** is the disclosure index in La Porta et al. (1998) and measures the inclusion or omission of 90 items in the 1990 annual reports. **Legal Enforcement** is the mean across the three legal variables in La Porta et al. (1998): (1) the efficiency of the judicial system, (2) assessment of the rule of law, and (3) the corruption index. **Block** is the sum of the percentages of the shares owned by the largest three shareholders. Block is available for 156 observations only.

Table 8 - Transparency of compensation disclosure and board dependence

	Predicted Sign	Set 1		Set 2		Set 3	
		Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant		4.90	8.69	4.96	5.53	5.79	6.83
		(3.00)	(5.58)	(3.16)	(3.62)	(3.36)	(4.40)
InsiderRatio	+	5.09	6.27	0.10	2.57		
		(8.11)	(10.37)	(0.16)	(4.02)		
CEO-Chair	+	-0.19	-0.25	0.75	0.41		
		(-0.67)	(-1.02)	(3.01)	(1.62)		
IncentivePay	+		1.03		0.86		0.84
			(2.11)		(2.19)		(2.08)
Log(TotalPay)	+		0.46		0.28		0.31
			(2.80)		(2.09)		(2.27)
Log(TotalAssets)	+	-0.06	-0.76	-0.05	-0.50	-0.06	-0.57
		(-0.40)	(-4.97)	(-0.49)	(-4.26)	(-0.50)	(-4.70)
M/B	+	0.02	0.01	-0.01	-0.03	-0.01	-0.03
		(0.58)	(0.48)	(-0.34)	(-1.32)	(-0.46)	(-1.18)
NetIncome	+	8.99	9.35	4.74	4.96	5.23	4.83
		(2.72)	(3.09)	(1.82)	(2.07)	(1.99)	(1.93)
N_Listed	+	0.09	-0.21	0.24	-0.03	0.28	0.05
		(0.86)	(-2.38)	(2.91)	(-0.39)	(3.43)	(0.64)
N_Director	-	-0.13	-0.03	-0.03	0.04	-0.02	0.04
		(-5.30)	(-1.10)	(-1.36)	(1.63)	(-0.82)	(1.50)
Industry, year fixed effects		No	No	Yes	Yes	Yes	Yes
Country fixed effects		No	No	Yes	Yes	Yes	Yes
Pseudo R^2		8.9%	22.1%	28.5%	38.3%	27.8%	36.8%
Number of observations		474	336	474	336	474	336

The table presents coefficients and two-tailed t-values (in parentheses) from the Tobit regressions with Disclosure as the dependent variable. **Model 1** uses annual observations for the years 1999 to 2001 from the 158 companies with available or missing compensation data. **Model 2** uses annual observations for the years 1999 to 2001 from the 112 disclosing companies. **Models 1** and **2** of **Set 1** include industry and year fixed effects, and those of **Set 2** and **3** use industry, year, and country fixed effects. The coefficients for industry, year, and country are omitted for brevity.

Disclosure is the overall measure for the type, amount, and quality of executive compensation disclosure. It ranges from zero to six. A higher value for Disclosure indicates more transparent disclosure of executive compensation. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise. **IncentivePay** is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. **Log(TotalPay)** is the natural logarithm of total annual compensation per manager. **Log(TotalAssets)** is the natural logarithm of the total assets at the fiscal year end. **M/B** is market value of equity divided by book value of equity at the end of the fiscal year. **NetIncome** is the net income deflated by total assets. **N_Listed** is the total number of stock exchanges on which a company's shares are listed. **N_Director** is the total number of directors.

Table 9 - The effect of institutional factors on transparency of compensation disclosure

	Institutional Factors					
	Common Law	Importance of Equity Market	Outside Investor Rights	Country Disclosure	Legal Enforcement	Block
InsiderRatio	-0.64	2.96	1.87	3.18	6.13	2.76
	(-1.12)	(5.23)	(3.15)	(5.52)	(10.3)	(3.52)
CEO-Chair	1.08	0.16	-0.42	-0.20	-0.47	-0.54
	(4.50)	(0.65)	(-1.68)	(-0.81)	(-0.18)	(-1.58)
Institutional Factor	5.57	0.20	1.06	0.21	1.22	-4.73
	(14.8)	(11.5)	(11.3)	(10.2)	(9.60)	(-5.85)
Pseudo R^2	22.3%	16.1%	15.7%	14.5%	14.1%	12.8%
No. of observations	474	474	474	474	474	156

The table presents coefficients and two-tailed t-values (in parentheses) from the Tobit regressions with Disclosure as the dependent variable. The regression model for each column includes, as an independent variable, an institutional factor, which is indicated at the top of the column.

Disclosure = f (InsiderRatio, CEO-Chair, Institutional Factor, Log(TotalAssets), M/B, NetIncome, N_Listed, N_Director, industry, year)

The coefficients for the other determinants of Disclosure are omitted for brevity. **Disclosure** is the overall measure for the type, amount, and quality of executive compensation disclosure. It ranges from zero to six. A higher value for Disclosure indicates more transparent disclosure of executive compensation. **InsiderRatio** is the ratio of the number of directors serving as company executives to total number of directors. **CEO-Chair** is a dummy variable equal to 1 if the CEO serves as the chair of the board and 0 otherwise. **IncentivePay** is the ratio of the sum of executive bonus, stock, and option grants to total executive compensation for each company. **Log(TotalPay)** is the natural logarithm of total annual compensation per manager. **Log(TotalAssets)** is the natural logarithm of the total assets at the fiscal year end. **M/B** is market value of equity divided by book value of equity at the end of the fiscal year. **NetIncome** is the net income deflated by total assets. **N_Listed** is the total number of stock exchanges on which a company's shares are listed. **N_Director** is the total number of directors.
The institutional factors are defined next. **Common Law** is the dummy variable for the common law country (the U.K.) as in La Porta et al. (1998). **Importance of Equity Market** is measured by the mean rank across three variables in La Porta et al. (1997): (1) the ratio of the aggregate stock market capitalization held by minorities to gross national product, (2) the number of listed domestic firms relative to the population, and (3) the number of IPOs relative to the population. Importance of Equity Market is taken from Leuz et al. (2003). **Outside Investor Rights** is the anti-director rights index in La Porta et al. (1998). It is an aggregate measure of minority shareholder rights. **Country Disclosure** is the disclosure index in La Porta et al. (1998) and measures the inclusion or omission of 90 items in the 1990 annual reports. **Legal Enforcement** is the mean across three legal variables in La Porta et al. (1998): (1) the efficiency of the judicial system, (2) assessment of the rule of law, and (3) the corruption index. **Block** is the sum of the percentages of the shares owned by the largest three shareholders. Block is available for 156 observations only.

Appendix 1 - European companies in the dataset and average values of the major variables between the years 1999 and 2001

	Name	Country	Disclosure	Incentive Pay	Total Pay	Executive Ratio	CEO-Chair
1	DaimlerChrysler	Germany	3.00	N/A	N/A	0.00	0
2	Royal Dutch/Shell Group	Holland	5.33	0.53	1,721	0.16	0
3	BP Amoco	UK	6.00	0.78	4,973	0.34	1
4	AXA Group	France	4.00	0.90	5,599	0.10	0
5	Volkswagen Group	Germany	2.33	0.05	1,970	0.00	0
6	TotalFina Elf	France	4.33	0.68	976	0.35	1
7	Siemens Group	Germany	3.00	0.75	1,540	0.00	0
8	Allianz Worldwide	Germany	2.33	0.47	1,189	0.00	0
9	CGNU	UK	6.00	0.47	1,576	0.45	0
10	ING Group	Holland	6.00	0.36	1,727	0.00	0
11	Deutsche Bank Group	Germany	4.00	N/A	N/A	0.00	0
12	E.On	Germany	2.33	0.17	2,533	0.00	0
13	Fiat Group	Italy	3.00	0.88	9,059	0.56	0
14	Generali	Italy	1.00	N/A	N/A	0.51	1
15	Credit Suisse Group	Switzerland	2.33	0.57	14,757	0.10	1
16	Nestle	Switzerland	1.67	0.75	2,632	0.20	0
17	Metro	Germany	2.33	0.28	2,079	0.00	0
18	Vivendi	France	4.00	N/A	N/A	0.31	1
19	Prudential	UK	5.67	0.66	1,933	0.43	0
20	Unilever	Holland	6.00	0.48	2,495	0.80	1
21	Fortis	Belgium	4.00	0.12	1,131	0.34	0
22	Zurich Financial Services	Switzerland	5.00	0.31	2,107	0.06	1
23	HSBC Group	UK	5.67	0.46	1,661	0.58	0
24	Peugeot Groupe	France	4.67	0.48	830	0.00	0
25	Legal & General Group	UK	6.00	0.61	1,536	0.44	0
26	Renault Group	France	3.33	0.65	603	0.10	1
27	BNP Paribas	France	3.33	0.77	2,177	0.11	1
28	Carrefour Group	France	1.67	0.41	1,500	0.21	1
29	ABN-Amro Holding	Holland	4.00	0.61	1,370	0.00	0
30	Deutsche Telekom	Germany	3.33	0.30	3,139	0.00	0
31	Munchener Ruck	Germany	3.00	0.56	1,139	0.00	0
32	RWE Group	Germany	3.00	N/A	N/A	0.00	0
33	BMW-Bayerische Motor	Germany	1.00	0.00	917	0.00	0
34	Ahold	Holland	4.33	0.39	2,027	0.00	0
35	ENI	Italy	2.00	0.51	1,623	0.11	0
36	Suez Lyonnaise	France	4.67	0.79	2,901	0.14	0
37	Philips Group	Holland	6.00	0.62	1,956	0.00	0
38	Thyssen Krupp	Germany	3.00	0.43	1,026	0.00	0
39	Bayer HypoVereinsbank	Germany	0.00	N/A	N/A	0.00	0
40	Tesco	UK	6.00	0.52	1,838	0.60	0

	Name	Country	Disclosure	Incentive Pay	Total Pay	Executive Ratio	CEO-Chair
41	BASF Group	Germany	2.67	0.19	1,347	0.00	0
42	British Telecom	UK	5.33	0.72	3,517	0.22	0
43	Olivetti Group	Italy	1.00	N/A	N/A	0.54	0
44	France Telecom	France	2.00	N/A	N/A	0.05	1
45	UBS	Switzerland	3.00	0.15	6,188	0.00	0
46	Societe Generale Group	France	5.00	0.62	5,240	0.10	1
47	J Sainsbury	UK	5.33	0.51	1,183	0.51	0
48	Royal & Sun Alliance	UK	6.00	0.20	879	0.35	0
49	Bayer Group	Germany	1.33	0.20	1,113	0.00	0
50	CNP Assurances	France	2.00	N/A	N/A	0.29	0
51	LM Ericsson	Sweden	4.00	N/A	N/A	0.00	1
52	ABB Group	Switzerland	1.00	N/A	N/A	0.11	0
53	Commerzbank	Germany	4.00	0.01	945	0.00	0
54	Banco Santander Central	Spain	2.00	N/A	N/A	0.78	1
55	Alcatel	France	5.00	0.67	2,185	0.26	1
56	Telefonica	Spain	4.00	0.53	984	0.19	1
57	Saint-Gobain	France	5.67	0.68	1,244	0.14	1
58	Aegon Insurance Group	Holland	6.00	0.70	2,799	0.05	0
59	Lloyds TSB Group	UK	6.00	0.49	1,345	0.44	0
60	Dresdner Bank	Germany	2.00	N/A	N/A	0.00	0
61	ENEL	Italy	2.67	0.58	973	0.14	0
62	Aventis	France	3.33	0.76	7,992	0.00	0
63	Barclays	UK	6.00	0.65	2,589	0.37	1
64	Repsol-YPF	Spain	4.33	0.60	2,286	0.49	1
65	Nokia	Finland	6.00	0.70	4,118	0.12	1
66	Pinault-Printemps-Redoute	France	3.00	N/A	N/A	0.00	0
67	Preussag Group (TUI)	Germany	2.00	N/A	N/A	0.00	0
68	Kingfisher	UK	6.00	0.44	1,149	0.55	1
69	Swiss Re Group	Switzerland	4.00	0.64	1,786	0.10	0
70	Roche Group	Switzerland	0.00	N/A	N/A	0.08	0
71	Abbey National	UK	6.00	0.32	811	0.54	0
72	Rallye	France	3.33	0.19	232	0.35	1
73	Swiss Life Ins & Pension	Switzerland	1.00	N/A	N/A	0.00	0
74	Diageo	UK	5.33	0.67	3,112	0.31	0
75	Novartis Group	Switzerland	4.00	0.76	2,455	0.08	1
76	Bouygues Group	France	4.00	0.61	1,397	0.39	1
77	Skandia Insurance	Sweden	3.67	0.62	390	0.03	0
78	Credit Lyonnais Group	France	5.00	0.44	650	0.05	1
79	Alstom	France	5.00	0.50	834	0.22	1
80	AstraZeneca	UK	6.00	0.58	2,158	0.42	0

	Name	Country	Disclosure	Incentive Pay	Total Pay	Executive Ratio	CEO-Chair
81	Karstadt Quelle	Germany	1.00	N/A	N/A	0.00	0
82	Corus Group	UK	6.00	0.07	549	0.46	0
83	Halifax	UK	6.00	0.61	571	0.39	0
84	Volvo Group	Sweden	3.33	0.12	745	0.00	0
85	British Amer Tobacco	UK	6.00	0.49	1,747	0.35	1
86	Akzo Nobel Group	Holland	6.00	0.62	1,162	0.00	0
87	Delhaize Le Lion Group	Belgium	2.33	0.15	545	0.17	0
88	Dexia	Belgium	2.33	0.40	806	0.05	0
89	British Airways	UK	4.00	0.18	806	0.24	0
90	Electrolux Group	Sweden	4.00	0.34	1,237	0.06	0
91	Gehe (Celesio)	Germany	3.00	N/A	N/A	0.00	0
92	Michelin Group	France	2.00	N/A	N/A	0.33	0
93	BBVA-Banco Bilbao	Spain	1.00	N/A	N/A	0.13	0
94	Old Mutual	UK	6.00	0.42	2,373	0.35	1
95	Usinor	France	5.00	0.41	602	0.11	1
96	M A N Group	Germany	2.33	0.56	699	0.00	0
97	Glaxo Wellcome	UK	6.00	0.66	2,032	0.23	0
98	Endesa Group	Spain	2.00	0.20	535	0.07	0
99	Groupe Danone	France	4.67	0.57	1,335	0.63	1
100	KBC Bankassurance	Belgium	0.00	N/A	N/A	0.42	0
101	Aerospatiale Matra (Eads)	France	1.00	N/A	N/A	0.00	0
102	Degussa-Huls	Germany	1.00	N/A	N/A	0.00	0
103	Marks & Spencer	UK	6.00	0.44	1,818	0.49	1
104	Deutsche Lufthansa	Germany	3.00	N/A	N/A	0.00	0
105	Norsk Hydro	Norway	3.00	N/A	N/A	0.00	0
106	Compart (Edison)	Italy	1.00	N/A	N/A	0.33	0
107	UniCredito Italiano	Italy	1.00	N/A	N/A	0.37	0
108	Vodafone AirTouch	UK	6.00	0.61	8,428	0.39	0
109	Royal Bank of Scotland	UK	6.00	0.67	2,675	0.39	0
110	Safeway Plc	UK	6.00	0.48	962	0.57	0
111	Adecco	Switzerland	3.00	N/A	N/A	0.00	0
112	Gruppo Intesa	Italy	1.00	N/A	N/A	0.28	1
113	Imperial Chemical Inds	UK	6.00	0.57	1,571	0.46	0
114	Bankgesellschaft Berlin	Germany	3.00	N/A	N/A	0.00	0
115	Centrica	UK	6.00	0.36	955	0.45	0
116	Henkel Group	Germany	3.00	0.04	1,219	0.00	0
117	Gazprom	Russia	1.00	N/A	N/A	0.00	0
118	BAE Systems	UK	6.00	0.58	1,808	0.53	0
119	Invensys	UK	6.00	0.43	1,579	0.33	0
120	L'Oreal Group	France	1.00	N/A	N/A	0.09	1

	Name	Country	Disclosure	Incentive Pay	Total Pay	Executive Ratio	CEO-Chair
121	Arbed	France	1.00	N/A	N/A	0.00	0
122	Stora Enso	Finland	6.00	0.39	1,214	0.18	0
123	Lafarge	France	3.67	0.76	2,884	0.26	1
124	Lukoil Holding	Russia	0.00	N/A	N/A	0.42	0
125	Air France Group	France	1.00	N/A	N/A	0.00	0
126	Alliance Unichem	UK	6.00	0.41	860	0.57	0
127	Cable & Wireless	UK	6.00	0.64	2,183	0.43	0
128	Somerfield	UK	6.00	0.27	748	0.61	1
129	CEA-Industrie (Areva)	France	0.00	N/A	N/A	1.00	1
130	Pechiney	France	4.00	0.53	888	0.39	1
131	Sodexho Alliance	France	2.00	N/A	N/A	0.18	1
132	Sberbank of Russia	Russia	0.00	N/A	N/A	0.00	0
133	Skanska	Sweden	4.00	0.33	684	0.07	0
134	Continental	Germany	3.00	0.09	643	0.00	0
135	Royal KPN	Holland	5.00	0.29	2,180	0.00	0
136	Sanpaolo IMI	Italy	5.33	0.69	1,552	0.55	0
137	Wolseley	UK	6.00	0.44	938	0.58	0
138	Great Universal Stores	UK	6.00	0.36	914	0.50	0
139	Christian Dior	France	2.00	N/A	N/A	0.50	1
140	Bank of Scotland	UK	6.00	0.70	2,010	0.41	1
141	Tomkins	UK	6.00	0.48	1,901	0.44	1
142	Marconi	UK	6.00	0.47	1,695	0.43	0
143	TNT Post Group	Holland	5.00	0.39	1,616	0.00	0
144	Schneider Electric	France	6.00	0.73	1,550	0.41	1
145	Schlumberger	Holland	1.00	N/A	N/A	0.08	0
146	UPM-Kymmene	Finland	2.00	N/A	N/A	0.09	1
147	Cepsa	Spain	1.00	N/A	N/A	0.32	1
148	Boots	UK	5.33	0.37	902	0.49	0
149	Solvay Group	Belgium	2.00	N/A	N/A	0.21	0
150	Compass Group	UK	6.00	0.74	4,571	0.51	1
151	Valeo	France	3.33	0.31	945	0.05	1
152	Mg technologies	Germany	6.00	0.64	1,179	0.00	0
153	Aegis Group	UK	6.00	0.59	1,606	0.60	0
154	BG Group	UK	3.00	N/A	N/A	0.25	0
155	Holderbank (Holcim)	Switzerland	0.00	N/A	N/A	0.10	1
156	Rolls-Royce	UK	6.00	0.46	1,091	0.58	0
157	SCA-Svenska Cellulosa	Sweden	4.00	0.50	306	0.09	0
158	Bass	UK	6.00	0.57	2,018	0.46	0

Appendix 2 - Disclosure practices across companies in the data set

Annual reports are the most comprehensive data sources about compensation practices. Alternative sources, such as company web sites, either repeat or summarize the executive compensation information contained in the annual reports. The proxy *Disclosure* measures the transparency of compensation disclosure in the annual report for each firm-year observation. Disclosure incorporates three aspects of compensation disclosure: type, amount, and quality.

Type of Disclosure: A company receives 1 point each if it explicitly discloses salary and bonus (*SalaryDisclosure*) and stock and option (*StockDisclosure*) compensation.

Amount of Disclosure: *AmountDisclosure* measures the number of disclosed compensation contracts. Companies that merely disclose either average executive pay or the compensation contract of only one executive receive no points; those that disclose two contracts receive 1 point; and those that disclose more than two contracts receive 2 points.

Quality of Disclosure: *QualityDisclosure* measures the extent to which a company releases the following information: (i) overall compensation policy and goals, (ii) pay-setting guidelines for specific positions, (iii) executive compensation in previous years, and (iv) future determinants of executive compensation. Companies that disclose none of the above items receive no points; those that disclose some receive 1 point; and those that disclose all items receive 2 points.

Disclosure, which is the sum of SalaryDisclosure, StockDisclosure, AmountDisclosure, and QualityDisclosure, takes a value between 0 and 6, with higher values indicating a higher extent and quality of disclosure. Companies with Disclosure scores between 0 and 3 are excluded from the empirical tests because these low scores generally result from the insufficient compensation data. Companies with scores between 3 and 6 are included in the empirical tests.

The mean Disclosure score for the 112 companies that are included in the data set is 4.62; the mean score for the 46 companies that are excluded is 1.62. The country of origin and the related legal disclosure requirements considerably affect the Disclosure score. The companies in the U.K. are the most transparent with a score of 5.81. The companies in Russia are the least transparent with a score of 0.33. However, the country origin is not the only determinant of compensation disclosure (Table 8). The Disclosure score varies significantly across companies within the same country. For instance, the mean Disclosure for French companies is 3.27. Out of the French companies, Michelin has a score of 2 and Schneider Electric has a score of 6.

Below are three examples on the disclosure practices of the companies in the sample. The examples also describe how the Disclosure proxy is constructed. The first example (BP Amoco with a Disclosure score of 6) exemplifies a high-disclosure company. The second example (Michelin with a Disclosure score of 2) exemplifies a low-disclosure company. The third example (Schneider Electric with a Disclosure score of 6) exemplifies the wide range of compensation disclosure practices within a country (e.g., France).

Example 1 - British Petroleum (BP)'s disclosure of executive compensation

BP 2001 annual report page 29:

"**Board/Executive relationship**

The board/executive relationship policy sets out how the board delegates authority to the group chief executive and the extent of that authority. In its goals policy, the board states the long-term outcome it expects the group chief executive to deliver. The restrictions on the manner in which the group chief executive may achieve the required results are set out in the executive limitations policy, which addresses ethics, health, safety, the environment, financial distress, internal control, risk preferences, treatment of employees and political considerations. On all these matters, the board's role is to set general policy and to monitor the implementation of that policy by the group chief executive. The group chief executive explains how he intends to deliver the required outcome in annual and medium-term plans, the former of which include a comprehensive assessment of the risks to delivery. Progress towards the expected

outcome is set out in a monthly report that covers actual results and a forecast of results for the current year. The board reviews this report at each meeting.

The board/executive relationship policy also sets out how the group chief executive's performance will be monitored and recognizes that, in the multitude of changing circumstances, judgement is always involved. The group chief executive is obliged through dialogue and systematic review to discuss with the board all material matters currently or prospectively affecting the company and its performance and all strategic projects or developments. This specifically includes any materially under-performing business activities and actions that breach the executive limitations policy. It also includes social, environmental and ethical considerations. This dialogue is a key feature of the board/executive relationship. Between board meetings the chairman has responsibility for ensuring the integrity and effectiveness of the board/executive relationship. The systems set out in the board/executive relationship policy are designed to manage rather than eliminate the risk of failure to achieve the board goals policy or observe the executive limitations policy. They provide reasonable, not absolute, assurance against material misstatement or loss.

Remuneration of executive directors

The board, through its Remuneration Committee, sets the rewards for the group chief executive and executive directors. The committee's policy and details of remuneration in 2001 are set out on pages 31 to 35 of this report."

Pages 31 to 35

"**Reward policy**

The Remuneration Committee's reward policy reflects its belief in the need to attract, motivate and retain world-class executive talent. The main principles of the policy are:

• Total reward levels should reflect the competitive global market and the committee actively seeks independent advice on this.

• The majority of the total reward is linked to achievement of demanding performance targets as shown in the descriptions of the elements of remuneration and the chart opposite. By way of illustration, in 2001 over three-quarters of the executive directors' remuneration was performance-based.

• Executive directors should share the interests of shareholders in making BP successful to the benefit of all shareholders. This is achieved through setting robust performance targets based on measures of shareholders' interests and through the committee's policy for executive directors to hold a significant shareholding in the company, currently equivalent to 5 x their base salary.

• The performance targets in the Executive Directors' Long Term Incentive Plan must encompass demanding comparisons of BP's shareholder returns and earnings with those of other companies in its own industry and in other sectors as well.

• The committee continually assesses whether the reward structure is achieving its objectives. In late 2001, it reviewed the existing remuneration of all executive directors relative to a comparator group of global companies. After taking independent external advice the committee agreed that there should be no major changes in the framework for total reward. In 2002 it will be reviewing long-term incentive awards.

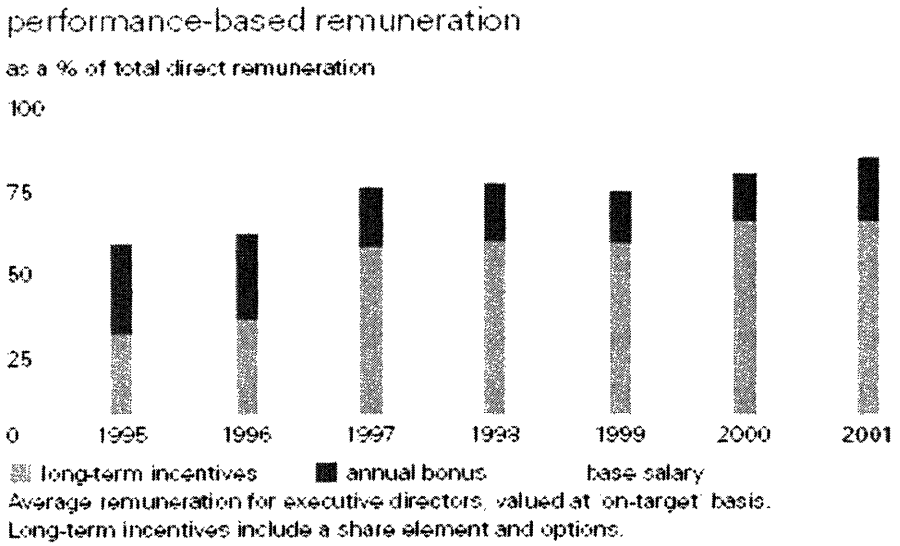
• In 2002 base salaries for the executive directors will be increased by less than 10%, in line with similar global companies.

• All UK executive directors appointed after 1996 should hold a contract of service with a maximum of a one-year period of notice.

Elements of remuneration

An increasing share of executive directors' pay is performance-related with the majority now based on long-term performance (see chart below). The more senior the executive, the greater the proportion of 'at risk' remuneration.

The executive directors' total remuneration consists of performance related and fixed components.



Performance-based components

There are long-term and short-term performance-related components. The Executive Directors' Long Term Incentive Plan (EDLTIP), which was approved by shareholders in April 2000, includes a share element, a share option element and a cash element.

The share element compares BP's performance against oil majors over three years, on a rolling basis. This has been assessed in terms of a three-year shareholder return against the market (SHRAM), return on average capital employed (ROACE) and earnings per share (EPS) growth.

The committee reviews and approves annually the performance measures and the comparator companies. The comparator group of companies used for the SHRAM performance condition in the share

element has been reduced so much by industry consolidation that the committee has decided for the 2002-2004 Plan to change to the FTSE All World Oil and Gas Index weighted by market capitalization. The committee is satisfied that this change does not make the performance targets of the Plan less demanding.

Performance units are granted at the beginning of the period and converted into an award of shares at the end of the three-year period, depending on performance. It is a condition for any such award that the individual holds shares equivalent to at least 5 x base salary. Shares awarded are then held in trust for three years before they are released to the individual. This gives the executive directors a six-year incentive structure, and ensures their interests are aligned with those of shareholders. The share option element reflects BP's performance relative to a wider selection of global companies. The committee will take into account BP's total shareholder return (TSR) compared with the TSR for the FTSE Global 100 group of companies over the three years preceding the grant. The cash element allows the Remuneration Committee to grant cash rather than share-based incentives in exceptional circumstances. This element was not used in 2001. The short-term performance-related component of executive directors' remuneration consists of an annual bonus. The Remuneration Committee reviews and sets bonus targets and level of eligibility annually. The target level is 100% of base salary (except for Lord Browne who has a 110% target). There is a stretch level of 150% of base salary for substantially exceeding targets. Targets consist of a mix of demanding financial targets and other leadership objectives covering areas such as people, safety, environment and organization.

Fixed components

The fixed components of remuneration are:

• Salary Fixed sum payable monthly in cash. The committee reviews salaries periodically in line with global markets. The appropriate survey groups are defined and analysed by a leading remuneration consultancy.

• Pension Executive directors are eligible to participate in the appropriate pension schemes applying in their home countries.

• Benefits and other share schemes Executive directors are eligible to participate in regular employee benefit plans, including health and life insurance, and in all-employee share schemes and savings plans, as applicable in their home countries.

• Resettlement allowance Expatriates may receive a resettlement allowance for a limited period.

Results for 2001

The company achieved a strong result in 2001, leading the industry on ROACE and EPS growth. SHRAM results placed BP second in the group of comparable oil companies. Cumulative savings on the combined cost structure of the enlarged group reached their target of $5.8 billion pre-tax, compared with a 1998

base. There was excellent progress on leadership targets such as people, safety, environment and organization.

summary of 2001 remuneration

	Long-term remuneration			Annual remuneration				
	Performance units granted under 2001-2003 share element[a]	Expected award 1999-2001 share element[b]	Share option grants[c]	2001 annual performance bonus $ thousand	Salary $ thousand	Benefits and other emoluments $ thousand	2001 total **$ thousand**	2000 total $ thousand
The Lord Browne of Madingley	415,000	472,500	1,289,843	2,566	1,728	79	**4,373**	2,762
Dr J G S Buchanan	165,000	280,000	253,971	933	691	32	**1,656**	1,527
R F Chase	205,000	315,000	312,171	1,147	850	45	**2,042**	1,723
W D Ford	170,000	175,000	261,036	972	720	496[d]	**2,188**	1,869
Dr B E Grote	155,000	175,000	241,092	898	665	301[d]	**1,864**	651
R L Olver	170,000	252,000	260,319	956	708	53	**1,717**	1,451
Director leaving the board in 2001								
Dr C S Gibson-Smith	–	252,000	–	773	497	444[e]	**1,714**	1,429

The table above represents remuneration received by executive directors in the 2001 financial year, with the exception of the 2001 annual bonus which was earned in 2001 but paid in 2002. A conversion rate of £1 = $1.44 has been used for 2001. £1 = $1.51 for 2000.

[a] Performance units granted under the 2001-2003 LTPP are converted to shares at the end of the performance period. Maximum of two shares per performance unit.
[b] Gross award of shares. Sufficient shares are sold to pay for tax applicable. Remaining shares are held in trust until 2005 when they are released to the individual.
[c] Options granted in February 2001 have a grant price of £5.67 per share. Mr Ford and Dr Grote hold ADSs; the above numbers and prices reflect calculated equivalents.
[d] Includes resettlement allowances for Mr Ford and Dr Grote of $440,000 and $300,000 respectively.
[e] Includes pay in lieu of notice for Dr Gibson-Smith of $386,000.

Long-term performance-based components

Long Term Performance Plan (LTPP) and share element

The LTPP award for the 1999-2001 performance period is made in February 2002 based on results achieved. The shares then have a minimum three years' retention in trust and no shares will be released until the director has a personal holding of BP shares equivalent to 5 x base salary.

timeline for 1999-2001 LTPP

Long Term Performance Plans (LTPP)

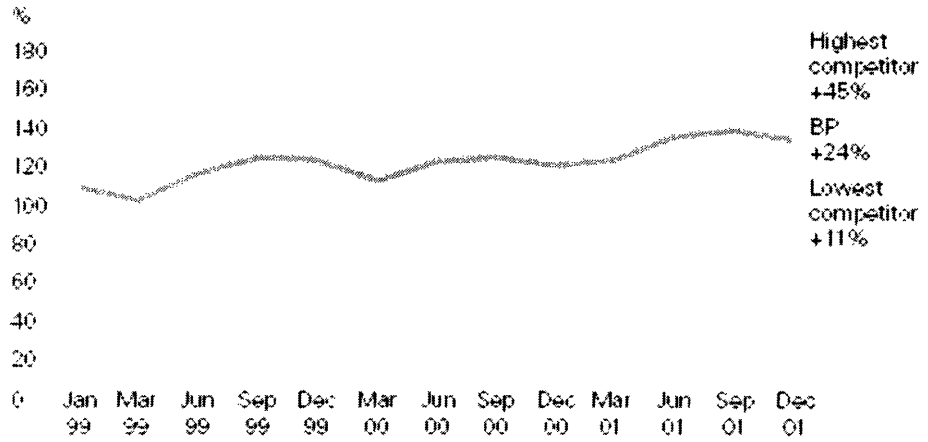
Performance period of Plan		1998-2000		1999-2001	2000-2002	2001-2003
Year of award		2001		2002	2003	2004
Performance measures[a]		SHRAM		SHRAM, EPS and ROACE	SHRAM, EPS and ROACE	SHRAM, EPS and ROACE
		Actual award		Expected award[c]	Maximum award	Maximum award
	(shares)	(value)[b] $ 000	(shares)	(value)[d] $ 000	(shares)	(shares)
Current executive directors						
The Lord Browne of Madingley	532,600	4,357	472,500	3,708	560,000	830,000
Dr J G S Buchanan	–[e]	–	280,000	2,197	308,000	330,000
B F Chase	339,000	2,773	315,000	2,472	348,000	410,000
W D Ford	–	–	175,000	1,373	264,000	340,000
Dr B E Grote	247,000	2,020	175,000	1,373	170,000	310,000
R L Olver	297,400	2,433	252,000	1,978	294,000	340,000
Former executive directors						
Dr C S Gibson-Smith	297,400	2,433	252,000	1,978	280,000	–
B K Sanderson	339,000	2,773	280,000	2,197	–	–
H L Fuller	–	–	472,500	3,708	–	–

[a] Shareholder return against the market (SHRAM), earnings per share (EPS), return on average capital employed (ROACE).
[b] Based on average market price on date of award (£5.68/$8.19 at £1 = $1.44).
[c] The Remuneration Committee's current expectation based on assessed performance and other terms of the Plan. The calculations for the 1999-2001 Plan include the share split.
[d] Based on mid-market price of BP shares on 12 February 2002 (£5.45/$7.85 at £1 = $1.44).
[e] Dr Buchanan elected to defer until 2004 the determination of whether an award should be made for this period.

For the 1998-2000 LTPP BP's performance was assessed in terms of three-year shareholder return against the market (SHRAM) in relation to the following companies: Chevron, ExxonMobil, Shell and Texaco. BP came first in the 1998-2000 Plan, and the Remuneration Committee made the maximum award of shares to executive directors in 2001. For the 1999-2001 Plan BP's SHRAM again exceeded ChevronTexaco, ExxonMobil and TotalFinaElf, but came second to Shell. The Remuneration Committee has also considered profitability and growth targets for the 1999-2001 Plan, i.e. return on average capital employed (ROACE) and earnings per share (EPS) growth. On both measures BP came first in assessing performance against the same oil companies.

Based on an initial performance assessment of 175 points out of 200, the committee expects to make an award of shares to executive directors as set out in the 1999-2001 column of the above LTPP table.

shareholder return against the market (SHRAM) 1999-2001



Share option element and other option schemes

Option grants in 2001 were made taking into consideration the ranking of the company's total shareholder return (TSR) against the TSR of the FTSE Global 100 group of companies over the three-year period from 1 January 1998. Options granted vest over three years (one-third each after one, two and three years respectively) and have a life of seven years after grant. Executive directors who retire after 1 January 2002 may retain vested options for this period.

directors' share options

	Option type	At 1 Jan 01	Granted	Exercised	At 31 Dec 01	Option price	Market price at date of exercise	Date from which first exercisable	Expiry date
The Lord Browne of Madingley	SAYE	5,968	–	–	5,968	£2.89	–	1 Sept 02	28 Feb 03
	EDLTIP	408,522	–	–	408,522	£5.99	–	15 May 01	15 May 07
	EDLTIP	–	1,269,843	–	1,269,843	£5.67	–	19 Feb 02	19 Feb 08
Dr J G S Buchanan	SAYE	2,980	–	2,980	–	£2.32	£5.60	1 Sept 01	28 Feb 02
	SAYE	1,856	–	–	1,856	£3.72	–	1 Sept 03	28 Feb 04
	SAYE	750	–	–	750	£4.50	–	1 Sept 04	28 Feb 05
	SAYE	–	1,320	–	1,320	£5.11	–	1 Sept 06	28 Feb 07
	EDLTIP	75,189	–	–	75,189	£5.99	–	15 May 01	15 May 07
	EDLTIP	–	253,971	–	253,971	£5.67	–	19 Feb 02	19 Feb 08
R F Chase	SAYE	3,388	–	–	3,388	£4.98	–	1 Sept 05	28 Feb 06
	EDLTIP	85,215	–	–	85,215	£5.99	–	15 May 01	15 May 07
	EDLTIP	–	312,171	–	312,171	£5.67	–	19 Feb 02	19 Feb 08
W D Ford[a]	NRSO	105,866	–	–	105,866	$20.80	–	22 Mar 95	22 Mar 04
	NRSO	119,100	–	–	109,100	$23.69	–	28 Mar 96	28 Mar 05
	NRSO	132,332	–	–	132,332	$27.68	–	26 Mar 97	26 Mar 06
	NRSO	132,332	–	–	132,332	$34.08	–	25 Mar 98	25 Mar 07
	NRSO	132,332	–	–	132,332	$32.92	–	24 Mar 99	24 Mar 08
	BPA	54,712	–	–	54,712	$53.90	–	15 Mar 00	14 Mar 09
	BPA	38,750	–	–	38,750	$48.94	–	28 Mar 01	27 Mar 10
	EDLTIP	–	43,506	–	43,506	$49.65	–	19 Feb 02	19 Feb 08
Dr B E Grote[a]	SAR	40,000	–	–	40,000	$13.63	–	23 Mar 93	23 Mar 03
	SAR	40,800	–	–	40,800	$16.63	–	25 Mar 94	25 Mar 04
	SAR	35,600	–	–	35,600	$19.16	–	28 Feb 95	28 Feb 05
	SAR	35,200	–	–	35,200	$25.27	–	6 Mar 96	6 Mar 06
	SAR	40,000	–	–	40,000	$33.34	–	28 Feb 97	28 Feb 07
	BPA	10,404	–	–	10,404	$53.90	–	15 Mar 00	14 Mar 09
	BPA	12,600	–	–	12,600	$48.94	–	28 Mar 01	27 Mar 10
	EDLTIP	–	40,182	–	40,182	$49.65	–	19 Feb 02	19 Feb 08
R L Olver	SAYE	4,470	–	4,470	–	£2.32	£5.29	1 Sept 01	28 Feb 02
	SAYE	2,386	–	–	2,386	£2.89	–	1 Sept 02	28 Feb 03
	SAYE	–	1,137	–	1,137	£5.11	–	1 Sept 03	28 Feb 04
	EDLTIP	71,847	–	–	71,847	£5.99	–	15 May 01	15 May 07
	EDLTIP	–	260,319	–	260,319	£5.67	–	19 Feb 02	19 Feb 08
Director leaving the board in 2001									
Dr C S Gibson-Smith	SAYE	2,154	–	–	2,154[b]	£4.50			
	EDLTIP	68,505	–	–	68,505[b]	£5.99			

EDLTIP = Executive Directors' Long Term Incentive Plan adopted by shareholders in April 2000 as described on page 32
BPA = BP Amoco share option plan which applied to US executive directors prior to the adoption of the EDLTIP
NRSO = Amoco Non-Restricted Stock Option which applied to Mr Ford as an employee of Amoco.
SAR = Stock Appreciation Rights under BP America Inc Share Appreciation Plan.
SAYE = Save As You Earn employee share option scheme.

[a] Numbers shown are ADSs under option. One ADS is equivalent to six ordinary shares.
[b] At retirement on 19 April 2001

Short-term performance-based component

Executive directors' annual bonus awards for 2001 were based on a mix of financial targets and leadership objectives established at the beginning of the year. Assessment of all the targets showed that, compared with a target performance of 100 points, 135 points were achieved, resulting in bonus awards as shown in the summary of remuneration on page 32.

Salaries

Each year the committee receives independent advice on competitive global salary markets for the group chief executive and for the other executive directors. Taking into account this advice and the fact that base salaries had not previously been increased since October 1999, the committee decided to increase Lord Browne's salary by 47% and the other executive directors' salaries by an average of 15% for 2001.

Service contracts

All executive directors appointed since 1996 hold a contract of service which includes a period of notice of one year or less, except Mr Ford. Lord Browne and Mr Chase were appointed prior to 1996 and have contracts with a two-year notice period. The board does not consider it in shareholders' interests to renegotiate these contracts.

Mr Ford has resigned from the board of BP p.l.c. with effect from 31 March 2002, at which time his secondment will end. His underlying US employment agreement with BP Corporation North America has a two month notice period. If his contract is terminated by BP Corporation North America without cause, it is required to pay him $1 million per annum (pro rated for part years) for each year between the date of severance and 21 January 2004.

pensions – UK directors

$ thousand[a]	Service at 31 Dec 01	Accrued benefit at 31 Dec 01	Additional pension earned during the year ended 31 Dec 01[b]	Additional pension earned during the year ended 31 Dec 00[b]
The Lord Browne of Madingley	35 yrs	1,152	346	(15)
Dr J G S Buchanan	32 yrs	461	29	15
R F Chase	37 yrs	566	62	(9)
Dr C S Gibson-Smith[c]	30 yrs	420	48	14
R L Olver	28 yrs	470	68	14

[a] An exchange rate of £1 = $1.44 has been used for 2001 (£1 = $1.51 for 2000).
[b] Excludes the impact of inflation.
[c] Figures shown at date ceased being a director (19 April 2001).

UK directors are members of the BP Pension Scheme. The Scheme offers Inland Revenue-approved retirement benefits based on final salary. It is the principal section of the BP Pension Fund, the latter being set up under trust deed. Company contributions to the Fund are made on the advice of the actuary appointed by the Trustee. No company contributions were made during 2001. Scheme members' core benefits are non-contributory. They include a pension accrual of 1/60th of basic salary for each year of service, subject to a maximum of two-thirds of final basic salary; a lump-sum death-in-service benefit of three times salary; and a dependant's benefit of two-thirds of the member's pension. The Scheme pension is not integrated with state pension benefits. Normal retirement age is 60, but Scheme members who have 30 or more years' pensionable service at age 55 can elect to retire early without an actuarial reduction being applied to their pension. Pensions payable from the Fund are guaranteed to be increased annually in line with changes to the Retail Prices Index, up to a maximum of 5% a year.

Directors accrue pension on a non-contributory basis at the enhanced rate of 2/60ths of their final salary for each year of service as executive directors (up to the same two-thirds limit). None of the directors is affected by the pensionable earnings cap.

pensions – US directors

$ thousand	Service at 31 Dec 01	Accrued benefit at 31 Dec 01	Additional pension earned during the year ended 31 Dec 01	Additional pension earned during the year ended 31 Dec 00
W D Ford	31 yrs	504[a]	128[a]	67
Dr B E Grote	22 yrs	83	14	10

[a] Includes a temporary annuity of $7,123 which is payable until age 62.

US directors participate in the BP Retirement Accumulation Plan. Under this Plan, the amount of the annuity they are eligible to receive on a single-life basis is determined using a cash balance formula. The Plan was established in 2000; it superseded earlier group pension and cash balance plans. However, those employees who satisfied certain age and service conditions at the date of transition to the Plan were provided with minimum benefits equal to those they would have earned under their previous pension arrangements. In line with US tax regulations, benefits are provided through a combination of tax qualified and restoration/nonqualified plans, as appropriate. Under these 'grandfathering' arrangements, the annuity benefit formula (which includes a percentage of US Social Security benefits) is calculated at 1.67% x years of participation x average annual earnings. These earnings are determined by taking separately the three highest consecutive calendar years' earnings from salary and the three highest consecutive calendar years' bonus awards during the 10 years preceding retirement. The maximum annuity is 60% of such average earnings.

Normal pensionable age is 65. No actuarial reduction is applied to the pension if it is paid from age 60; however, a reduction of 5% a year is applied if paid between ages 50 and 59. Mr Ford is subject to the 'grandfathering' arrangements and his figures have been disclosed on this basis. Dr Grote is not subject to the 'grandfathering' arrangements. His benefit is determined by the cash balance formula, under which each year of service accrues a monetary credit in a current account. The credit is based on a sliding scale, referencing age and service, and is subject to a minimum of 4% and a maximum of 11% of eligible pay. The account balance earns interest on a monthly basis.

The Remuneration Committee

The Remuneration Committee decides the remuneration policy and sets the terms of engagement and total rewards of the executive directors. The committee agrees each executive director's service contract, salary, targets and bonus scheme, and the grants of options and performance units under the Executive Directors' Long Term Incentive Plan.

Its members are all independent non-executive directors. The current membership is Sir Robin Nicholson (chairman), Mr Knight, Sir Ian Prosser, Mr Davis and Dr Julius. During the year Mrs Block, Mr Ferris and

the Lord Wright of Richmond retired. Like other directors, each member of the committee is subject to periodic re-election every three years. They have no personal financial interest, other than as shareholders, in the committee's decisions. They have no conflicts of interest arising from cross-directorships with the executive directors nor from being involved in the day-to-day business of the company. The committee met five times in the period under review. The committee consults the group chief executive on matters relating to other executive directors who report to him. He is not present when matters affecting his own remuneration are considered. The chairman of the board also attends meetings when appropriate. The committee is serviced independently of the executive management and actively seeks advice from external professional consultants. In its constitution and operation it complies with the 'Principles of Good Governance and Code of Best Practice' set out by the Listing Rules of the Financial Services Authority (FSA). Ernst & Young LLP have confirmed that the scope of their report on the accounts covers the disclosures contained in this report that are specified for audit by the Listing Rules."

BP Disclosure Score

Type of Compensation Disclosure: BP explicitly discloses its fixed and variable compensation (SalaryDisclosure = 1 and StockDisclosure = 1).

Amount of Compensation Disclosure: BP discloses the compensation of its top six executive directors (AmountDisclosure = 2).

Quality of Compensation Disclosure: The annual report includes extensive discussions about (i) overall compensation policy and goals, (ii) pay-setting guidelines for specific positions, (iii) executive compensation in previous years, and (iv) future determinants of executive compensation (QualityDisclosure = 2).

Disclosure, which is the sum of SalaryDisclosure, StockDisclosure, AmountDisclosure, and QualityDisclosure, is 6.

Example 2 - Michelin's disclosure of executive compensation

Michelin 2001 annual report page 66:

"**Compensation paid to the Managing Partners and Supervisory Board**

Managing Partners

- Under the terms of the Company's bylaws, as General Partners of the Company, the three Managing Partners receive a certain proportion of the Company's net income. The total amount paid to them in 2001 out of 2000 net income was €5,998,487.33

- The Managing Partners do not receive any compensation or benefits."

Page 89

"**23. Management compensation**

Compagnie Générale des Etablissements Michelin is administered by Managing Partners ("*Gérants*") who are also general partners ("*associés commandités*") of the Company. As such, they are entitled to a share of the income distributed among all the general partners in accordance with the provisions of the Company's bylaws. The Managing Partners do not receive any compensation or other benefits from Compagnie Générale des Etablissements Michelin or any of its subsidiaries or affiliates."

Michelin Disclosure Score

Type of Compensation Disclosure: Michelin explicitly discloses that it grants no fixed compensation and reveals the amount of the bonus payments (SalaryDisclosure = 1). The stock and option compensation is reported to be nonexistent (StockDisclosure = 1).

Amount of Compensation Disclosure: Michelin discloses only the average executive pay (AmountDisclosure is 0).

Quality of Compensation Disclosure: The compensation disclosure in the annual report is very limited. There is no discussion about (i) overall compensation policy and goals, (ii) pay-setting guidelines for specific positions, (iii) executive compensation in previous years, and (iv) future determinants of executive compensation (QualityDisclosure is 0).

Disclosure, which is the sum of SalaryDisclosure, StockDisclosure, AmountDisclosure, and QualityDisclosure, is 2.

Example 3 - Schneider Electric's disclosure of executive compensation

Schneider Electric 2001 annual report page 23:

"Schneider Electric uses a number of methods to give employees a personal and fair stake in the Company's achievements, including profit-linked incentive programs, employee share ownership, stock options, variable compensation and bonuses. Depending on the country and position, variable compensation can represent 10% to 25% of a manager's fixed salary. The collective portion of variable compensation is based on operating margin while the individual portion is based on targets met by the unit and on personal performance.

Although stock options are granted in fixed amounts, the number of options that may be exercised is dependent upon the Company reaching its financial objectives. For example, the number of stock options that may be exercised by the recipients of our most recent grant of stock options will depend on the achievement of the sales and operating margin objectives of our NEW2004 program."

Pages 48 and 49

"**Remunerations and Appointments Committee**

From January 1 to October 19, 2001, the Remunerations and Appointments Committee comprised:

MM. Claude Bébéar, Chairman, Jean-René Fourtou, Michel François-Poncet, Henri Lachmann, Didier Pineau-Valencienne.

The Committee's current members: MM. Claude Bébéar, Chairman; Jean-René Fourtou, Michel François-Poncet, Henri Lachmann.

The Committee is regularly informed of the Group's compensation policies, especially executive compensation. It reviews stock option plans and employee stock purchase plans decided by the Board and makes recommendations to the Board concerning the remuneration of corporate officers and the appointment of Directors and members of Board Committees. In 2001, the Committee recommended eliminating the position of Chief Operating Officer and appointing Willy Kissling as a Director. The Remunerations and Appointments Committee met four times in 2001, with an attendance rate of 84%. It informed the Board of Directors of its findings on February 28, October 19 and December 12, 2001.

Remuneration of Corporate Officers and Executive Committee Members

The Remunerations and Appointments Committee makes recommendations to the Board of Directors concerning the remuneration of corporate officers. It also reviews executive compensation, particularly for members of the Executive Committee. Since reorganizing in October 2001, General Management has been represented by an eight member Executive Committee chaired by Henri Lachmann. The Executive Committee members are paid a fixed salary plus a variable bonus representing a certain percentage of their fixed salary. The total remuneration package of each member is set at a competitive level compared

with the remuneration paid to members of senior management of similar industrial groups in their respective countries. The amount of each package is determined based on analyses and comparisons performed by international consulting firms specialized in executive remuneration issues. Executive bonuses are determined based on objectives set at the beginning of the year. They can therefore vary significantly, depending on the degree to which the objectives are met. The objectives concern Schneider Electric's performance (consolidated sales and net income before goodwill) and they also include quantitative targets related to the unit headed by the executive concerned or qualitative targets based on personal performance. The bonuses are paid following approval of the financial statements for the year to which they relate. To involve senior executives more closely in the growth and development of Schneider Electric's business, their variable bonuses represent a greater proportion of their total remuneration package than is the practice among other industrial groups. Executive Committee members and corporate officers also benefit from stock option plans.

Executive compensation in 2001

In 2001, Group companies paid a total of €8.0 million to members of the Executive Committee, of which €3.4 million in variable bonuses. This includes the Executive Committee members' fixed salaries and benefits for 2001 and their variable bonuses for 2000, paid in 2001. The variable bonus was based on three corporate financial criteria, as well as on quantitative and qualitative targets related to the unit headed by the executive concerned.

The corporate financial criteria were as follows:

- Growth in earnings per share, which amounted to 26.9% in 2000.
- Sales growth, which came to 6.9% in 2000 excluding the currency effect and after removing companies acquired after January 1, 2000 from the 2000 reference figure.
- The performance of the Schneider Electric share in relation to a benchmark index of European industrial stocks. In 2000, the share underperformed the index by 0.09%.

The total covers all members of the Executive Committee for the period during which they were members. One member resigned on January 19, 2001 and Jean-Paul Jacamon resigned on October 19, 2001.

Remuneration of corporate officers in 2001

Total remuneration, including attendance fees:

Henri Lachmann Amounts paid in 2001

- Fixed salary and benefits: €735,600
- Attendance fees: €53,700
- Variable bonuses for 2000 and 1999: €947,600

Jean-Paul Jacamon Amounts paid in 2001

- Fixed salary and benefits: €386,400
- Attendance fees: €30,700
- Variable bonuses for 2000 and 1999: €628,400"

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"Stock option plans

Grant policy

Stock option plans are approved by the Board of Directors following a review of the plans by the Remunerations and Appointments Committee. Plan number 19 was decided as part of the annual policy to grant stock options. The 1,050 grantees included the 250 members of senior management, 100 high potential executives and 700 employees who performed exceptionally well. The number of options granted to a given grantee depended on his or her position within the organization and his or her personal performance. Plan number 20, which covers 180 people, is designed to motivate the Company's senior managers to meet targets set out in the NEW 2004 program.

Description

The exercise price is equal to the average share price prior to the date of grant by the Board of Directors. No discount is applied. The options have an eight year life. Options granted under plans 12 through 19 may be exercised as from the fourth year, as long as the grantee holds the shares subscribed or acquired in registered form until the end of a five-year period following the date of grant. In certain cases, however, the options may be exercised without condition as from the third year. Options granted under plan 20 may be exercised without condition as from the fourth year or, in certain cases, as from the third year.

Options granted under plans 11, 12, 14 through 18 and plan 20 may be exercised provided that specific targets are met concerning income, value creation or sales. Because these targets were only partially achieved, 1,320,219 options granted under plans 15, 16 and 17 were cancelled in 2001.

Outstanding options

(at December 31, 2001)

Plan no.	Date of Shareholder's Meeting	Date of Board Meeting	Type	Number of options outstanding at Dec. 31, 2000	Options exercised in 2001	Options cancelled in 2001	Options granted in 2001	Number of options outstanding at Dec. 31, 2001	Number of grantees	Starting date of exercice period	Expiration date	Price in euros
9	06.29.93	04.07.95	S	501,300	25,100			476,200	31	04.07.00	04.07.03	24.93
10	06.29.93	04.07.95	S	219,830	45,450			174,380	131	04.07.00	04.07.03	24.93
11	06.27.95	06.13.96	S	495,900	78,755	5,200		411,945	215	06.13.01	06.13.04	35.37
12	06.27.95	01.24.97	S	1,295,000	23,000	21,000		1,251,000	47	01.24.00	01.24.04	35.67
13	06.27.95	06.10.97	S	693,900	2,300	6,000		685,600	252	06.10.00	06.10.04	44.52
14	06.27.95	01.28.98	P	1,026,200		12,000		1,014,200	272	01.28.01	01.28.05	50.77
15	06.27.95	12.22.98	P	60,000		13,392 (1)		46,608	1	12.22.01	12.22.05	50.86
16	06.27.95	04.01.99	P	1,257,800		262,327 (1)		995,473	317	04.01.02	04.01.07	50.73
17	06.27.95	04.01.99	P	2,123,100		1,044,500 (1)		1,078,600	490	04.01.02	04.01.07	50.73
18	05.06.99	03.24.00	P	1,421,200				1,421,200	964	03.24.03	03.23.08	65.88
19	05.06.99	04.04.01	S or P*	–			1,557,850	1,557,850	1,050	04.04.05	04.04.09	68.80
20	05.06.99	12.12.01	S	–			1,600,000	1,600,000	180	12.12.04	12.12.09	51.76

S = Options to subscribe new shares.

P = Options to purchase existing shares.

** The Board of Directors will determine the nature of plan 19 (subscription or purchase) before April 4, 2004.*

(1) Cancelled because targets only partially achieved (see above).

Options granted to and exercised by corporate officers and the top grantees during the year

Options granted during the year to corporate officers	Plan 19			Plan 20		
	Number of options	Exercise price	Expires	Number of options	Exercice price	Expires
Henri Lachmann	168,000	68.8	2010	100,000	51.76	2010
Jean-Paul Jacamon	37,500	68.8	2010			

Options exercised during the year by corporate officers		Plan 9		Plan 10		Plan 11		Plan 12	
	Total number of options exercised	Number of options	Exercise price	Number of options	Exercise price	Number of options	Exercise price	Number of options	Exercise price
Henri Lachmann	–	–	–	–	–	–	–	–	–
Jean-Paul Jacamon	41,320	5,600	24.92	8,200	24.92	7,520	35.37	20,000	35.67

Options granted to and exercised by the top ten employee grantees during the year			Plan 10	Plan 11	Plan 19	Plan 20
	Total number of options granted	Avg. weighted price	Number of options exercised	Number of options exercised	Number of options granted	Number of options granted
Granted	514,400	56.88			166,800	343,600
Exercised	2,650	31.89	880	1,770		

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"Resolutions voted on in Annual Shareholders' Meeting

The Board of Directors may award exceptional compensation to Directors for the performance of specific tasks or for their membership on committees of the Board. Any such compensation shall be included in the Company's operating expenses and shall be submitted to the Ordinary General Meeting of shareholders for approval in accordance with the law."

"The Board of Directors shall determine the compensation of the Chief Executive Officer and his or her term of office, which may not exceed either the period for which the decision has been made to separate the functions of Chairman and Chief Executive Officer or his or her term as Director, where applicable."

""On the recommendation of the Chief Executive Officer, the Board of Directors may appoint one or several individuals to assist the Chief Executive Officer. These individuals shall have the title of Chief Operating Officer. The Board of Directors shall determine jointly with the Chief Executive Officer the terms of office and the powers of the Chief Operating Officers. The Board of Directors shall determine the compensation paid to the Chief Operating Officers."

Schneider Electric Disclosure Score

Type of Compensation Disclosure: Schneider Electric explicitly discloses its fixed and variable compensation as well as stock and option grants (SalaryDisclosure = 1 and StockDisclosure = 1).

Amount of Compensation Disclosure: Schneider Electric discloses compensation to the top two executives as well as the total amount of compensation to the executive committee (AmountDisclosure = 2).

Quality of Compensation Disclosure: The compensation disclosure in the annual report includes discussions about (i) overall compensation policy and goals, (ii) pay-setting guidelines for specific positions, (iii) executive compensation in previous years, and (iv) future determinants of executive compensation (QualityDisclosure = 2).

Disclosure, which is the sum of SalaryDisclosure, StockDisclosure, AmountDisclosure, and QualityDisclosure, is 6.