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# Does Say on Pay Matter? Evidence from the German Natural Experiment

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## Non-Technical Summary

Shareholder involvement in compensation decisions has evolved as the patent remedy that regulators choose to apply across jurisdictions when they aim to cure perceived deficits in executive pay. There exists an already impressive track record of revisions on shareholder rights established by the European Commission.

However, this relative uniformity in the general approach should not disguise the considerable variation in the respective institutional arrangements. A more granular analysis indicates that while some jurisdictions opt for mandatory shareholder voice others leave shareholder involvement to managerial discretion, a result which sometimes also hinges on the pertinent rules character as non-compelling self-regulation. While sometimes the shareholder vote is binding, it is only consultative in other cases with varying degrees of soft coercion. Differences also pertain to how often shareholders have to be approached and on what exactly they are asked to vote on (remuneration policy, individual compensation packages ex post etc.).

At least in part the observed differences can be traced to disagreement on say on pay's merits in general and its adequate design in particular. Furthermore, in comparative perspective, say on pay's potential to add value may also hinge on existing institutional alternatives: corporate law may either provide other governance arrangements that seek to align managements' remuneration packages with shareholder interests or – more broadly – pursue different strategies to prevent executive rent seeking. As we will present, from a corporate governance vantage, Germany represents a particularly interesting example in several respects.

This paper investigates the potential implications of say on pay on management remuneration in Germany. Therefore, we try to shed light on some key aspects by presenting quantitative data that allows us to gauge the pertinent effects of the German natural experiment that originates with the 2009 amendments to the Stock Corporation Act of 1965. In order to do this, we deploy a hand-collected data set for Germany's major firms, i.e. those included in the main stock market index, the DAX 30, for the years 2006-2012. Rather than focusing exclusively on CEO remuneration we collected data for all members of the management board for the whole period under investigation.

We conclude with several findings. First, we observe that the compensation packages of management board members of Germany's DAX30-firms are quite closely linked to key performance measures such as return-on-assets and EBIT. In addition, we find that salaries increase with the size of the company. Second, our analysis indicates that ownership concentration has no significant effect on compensation, which can be read as support of the view that managerial self-serving by usurping the payroll is largely absent even where companies exhibit dispersed share ownership. Third, and most important for our topic, our findings suggest that the two-tier system seems to matter a lot when it comes to compensation. Our analysis implies that this control layer consolidated in organizational law works quite well when it comes to aligning compensation more closely with shareholder value

and firm performance. However, it would be misleading to state that we see no significant impact of the introduction of the German say on pay-regime. Our findings suggest that supervisory boards anticipate shareholder-behavior. This can be seen, for instance, in 2010 (i.e. the year that shareholders could express their evaluation of compensation schemes for the first time): remuneration was noticeably reduced even after controlling for performance measures, which also contributed to the high acceptance rates in most of the 2010 votes. It is also noteworthy, that in subsequent years, shareholders were less frequently consulted by say on pay-resolutions.

These findings cast a somewhat dubious light on the recent Commission proposals to introduce a mandatory and binding say on pay-vote in all E.U. jurisdictions. Our analysis lends some plausibility to the critique that this form of direct shareholder involvement would damage an established and well-functioning regime that largely adjusts management incentives to shareholders' objective function through incentive compensation schemes. This accords with the view, that the supervisory board serves as a well-informed bargaining agent for (dispersed) shareholders when it comes to negotiating proper incentive contracts. Yet, our results can also be read in a way that mandatory periodic, albeit consultative shareholder involvement could further increase the accountability – of at least – the shareholder representatives on the supervisory board.

# DOES SAY ON PAY MATTER? EVIDENCE FROM THE GERMAN NATURAL EXPERIMENT

Tobias H. Tröger\* & Uwe Walz\*\*#

## 1 INTRODUCTION

Shareholder involvement in compensation decisions has evolved as the patent remedy that regulators choose to apply across jurisdictions when they aim to cure perceived deficits in executive pay. The latest add-on to this already impressive track record can be found in arts. 9a and 9b of the European Commission's proposal for a revised Shareholder Rights directive.<sup>1</sup>

However, this relative uniformity in the general approach should not disguise the considerable variation in the respective institutional arrangements. A more granular analysis<sup>2</sup>

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<sup>1</sup> Proposal for a Directive of the European Parliament and of the Council amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement and Directive 2013/34/EU as regards certain elements of the corporate governance statement, COM (2014) 213 final, available at [http://ec.europa.eu/internal\\_market/company/docs/modern/cgp/shrd/140409-shrd\\_en.pdf](http://ec.europa.eu/internal_market/company/docs/modern/cgp/shrd/140409-shrd_en.pdf).

<sup>2</sup> The most comprehensive comparative survey encompassing eight jurisdictions is Randall S. Thomas & Christoph Van der Elst, *The International Scope of Say on Pay* 5-64 (Eur. Corp. Governance Inst. (ECGI), Law Working Paper 227, 2013) available at <http://ssrn.com/abstract=2307510>. A shorter overview for 11 European countries can be found in Roberto Barontini, Stefano Bozzi, Guido Ferrarini & Maria-Cristina Ungureanu, *Directors'*

indicates that while some jurisdictions opt for mandatory shareholder voice others leave shareholder involvement to managerial discretion, a result which sometimes also hinges on the pertinent rules character as non-compelling self-regulation. While sometimes the shareholder vote is binding,<sup>3</sup> it is only consultative in other cases with varying degrees of soft coercion. Differences also pertain to how often shareholders have to be approached and on what exactly they are asked to vote on (remuneration policy, individual compensation packages *ex post* etc.).

At least in part the observed differences can be traced to disagreement on say on pay's merits in general and its adequate design in particular. Furthermore, in comparative perspective, say on pay's potential to add value may also hinge on existing institutional alternatives: corporate law may either provide other governance arrangements that seek to align managements' remuneration packages with shareholder interests or—more broadly—pursue different strategies to prevent executive rent seeking.<sup>4</sup>

This paper tries to shed light on some key aspects by presenting quantitative data that allows us to gauge the pertinent effects of the German natural experiment that originates with the 2009 amendments<sup>5</sup> to the Stock Corporation Act of 1965. From a corporate governance vantage, Germany represents an interesting example in several respects.

First, in its say on pay-regime it has opted for a voluntary,<sup>6</sup> non-binding shareholder consultation that pertains only to the general compensation scheme and attaches practically no

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*remuneration before and after the crisis: measuring the impact of reforms in Europe*, in *BOARDS AND SHAREHOLDERS IN EUROPEAN LISTED COMPANIES* 251, tbl.1 (Massimo Belcredi & Guido Ferrarini eds., 2013). Riccardo Correa & Ugur Lel, *Say on Pay Laws, Executive Compensation, CEO Pay Slice, and Firm Value Around the World* 37 (Fed. Reserve Working Paper 2013), available at <http://ssrn.com/abstract=2243921> present data reflecting the status of say on pay-regulation in 38 jurisdictions, yet face considerable doubts with regard to the reliability of their information as the place for instance Germany wrongly in the (control) group without say on pay regulation; for further criticism see Thomas & Van der Elst *id.*, at 5 note 11. For a brief summary of our own preliminary findings *cf.* table 5.

<sup>3</sup> We consider the vote binding only if it determines individual compensation packages within its scope.

<sup>4</sup> For a taxonomy of potential strategies to counter vertical agency conflicts within the firm see John Armour, Henry Hansmann & Reinier Kraakman, *Agency Problems and Legal Strategies*, in *THE ANATOMY OF CORPORATE LAW* 35, 37-45 (Kraakman et al. eds., 2d ed. 2009).

<sup>5</sup> Gesetz zur Angemessenheit der Vorstandsvergütung (VorstAG) [Act on Adequate Executive Compensation], July 31, 2009, BGBl. I at 2509.

<sup>6</sup> The self-regulating German Corporate Governance Code does not contain a recommendation to consult the shareholder meeting in compensation matters.

legal sanctions to the vote.<sup>7</sup> Hence, in pertinent part German corporate law relies purely on market discipline as a function of negative cost of capital-effects that poor corporate governance should entail in efficient markets. It thus differs from those institutional set-ups that provide for rather rigid legal consequences in case of shareholder discontent and thus bolster shareholder voice with law's momentum.

Second, direct shareholder involvement in compensation decisions represents a legal transplant that runs counter to the German tradition that vests the right to determine executive compensation with shareholder (and labor<sup>8</sup>) representatives on the supervisory board (two tier system). Hence, say on pay may either improve a deficient arrangement or constitute a redundant, cost-hiking institution. More fatal, the shift of competences from the supervisory board to the shareholder meeting that say on pay implies may even corrupt a well-functioning and theoretically sound governance arrangement.<sup>9</sup>

Finally, looking at Germany is also rewarding insofar because the rather concentrated ownership structure of its firms<sup>10</sup> allows assessing whether a formal say on pay-regime is nothing but a (superfluous) substitute for the influence a large blockholder usually has at hand through informal channels<sup>11</sup> or if it also represents a valuable tool for minorities. The latter hypothesis may draw on the intuition that if massive divestments indeed represent a meaningful threat,<sup>12</sup> any expressed discontent of informed (minority) investors with key corporate

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<sup>7</sup> Aktiengesetz [AktG, Stock Corporation Act], Sept. 6, 1965, BGBI. I at 1089, § 120(4) provides that the shareholders' meeting of a listed company may resolve on the approval of the compensation scheme. The resolution shall not give rise to any rights or obligations; in particular, the obligations of the supervisory board pursuant to § 87 shall remain unaffected. The resolution shall not be voidable pursuant to § 243.

<sup>8</sup> Large German firms are subject to codetermination, *i.e.* the supervisory board is filled with parity by shareholder and employee representatives. For a detailed description of the statutory foundations *see* Herbert Wiedemann, *Codetermination by Workers in German Enterprises*, 28 AM. J. COMP. L. 79 (1980); for a brief overview *see* Katharina Pistor, *Codetermination in Germany: A Socio Political Model with Governance Externalities*, in EMPLOYEES AND CORPORATE GOVERNANCE 163, 174-5 (Margareth Blair & Mark J. Roe eds., 1999).

<sup>9</sup> On the theory that demands a strong bargaining agent for shareholders to negotiate proper incentive contracts with management *see supra* 2.1.

<sup>10</sup> For the fundamental observation *see* Rafael LaPorta, Florencio Lopez-de Silanes, Robert Vishny & Andrej Shleifer, *Corporate Ownership Around the World*, 54 J. Fin. 471 (1997); Marco Becht & Ailsa Röell, *Blockholdings in Europe: An International Comparison*, 43 Eur. Econ. Rev. 1049 (1999).

<sup>11</sup> For this view *cf.* for instance Thomas & Van der Elst *supra* note 2, at 3.

<sup>12</sup> Recent theoretical contributions show that the most effective 'corrective action' available to shareholders who are dissatisfied with a firm's corporate governance may be to strategically sell the stock and thereby voice discontent via exit, *cf.* Mukkaram Attari, Suman Banerjee, and Thomas Noe, *Crushed by Rational Stampede: Strategic Share Dumping and*

governance practices should be attentively noticed as an early alarm and hence entail the consequence of a change of course. Yet, as a tool to curb managerial self-service, say on pay arguably is ineffective as an antidote to tunneling.<sup>13</sup>

The remainder of this paper is structured as follows. We first briefly survey the theoretical and empirical literature on the merits of direct shareholder involvement in compensation decisions; through this we further develop the hypotheses for our empirical analysis.<sup>14</sup> We start the latter with a description of our sample and the variables we design.<sup>15</sup> In our analysis we provide descriptive statistics and estimate regressions.<sup>16</sup> We finally conclude.<sup>17</sup>

## 2 SHAREHOLDER INVOLVEMENT IN BOARD REMUNERATION: THEORY AND EVIDENCE

### 2.1 INCENTIVE COMPENSATION AS A SOLUTION TO AGENCY CONFLICTS AND THE SIGNIFICANCE OF DIRECT SHAREHOLDER INVOLVEMENT

At first glance, the rationale underpinning the success story of say on pay-regimes across jurisdictions is straightforward and intuitive. The optimal contracting approach to executive compensation considers adequately designed incentive compensation as a powerful tool to attenuate the principal agent conflict between (dispersed) shareholders and managers.<sup>18</sup>

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*Shareholder Insurrections*, 79 J. FIN. ECON. 181 (2006); Anat Admati & Paul Pfleiderer, *The 'Wall Street Walk' and Shareholder Activism: Exit as A Form of Voice*, 22 REV. FIN. STUD. 2445 (2008); Radhakrishnan Gopalan, *Institutional Stock Sales and Takeovers: The Disciplinary Role of Voting with Your Feet* (Working Paper 2008) available at <http://ssrn.com/abstract=891515>; Alex Edmans, *Blockholder Trading, Market Efficiency, and Managerial Myopia*, 22 J. FIN. 4881 (2009); Alex Edmans & Gustavo Manso, *Governance Through Trading and Intervention: A Theory of Multiple Blockholders*, 24 REV. FIN. STUD. 2395 (2011).

<sup>13</sup> For an influential description of the phenomenon of dominant shareholder rent-seeking see Simon Johnson, Rafael LaPorta, Florencio Lopez-de-Silanes & Andrei Shleifer, *Tunneling*, 90 AM. ECON. REV. 22 (2000).

<sup>14</sup> *Infra* 2.

<sup>15</sup> *Infra* 3.

<sup>16</sup> *Infra* 0.

<sup>17</sup> *Infra* 5.

<sup>18</sup> Formative contributions to this momentous school of thought include Stephen A. Ross, *The Economic Theory of Agency: The Principal's Problem*, 63 AM. ECON. REV. 134 (1973); James A. Mirrlees, *The Optimal Structure of Incentives and Authority Within an Organization*, 7 BELL. J. ECON. 105 (1976); Bengt Holmstrom, *Moral Hazard and Observability*, 10 BELL. J. ECON. 74 (1979); Stephen Shavell, *Risk Sharing and Incentives in the Principal and Agent Relationship*, 10 BELL. J. ECON. 55 (1979); Bengt Holmstrom, *Moral Hazard in Teams*, 13 BELL. J. ECON. 324 (1982); Sanford J. Grossman & Oliver D. Hart, *An Analysis of*

The substantial criticism that was voiced, particularly during the last decade, does not challenge the basic presumptions of the approach that incentive compensation may align managers' interest with shareholder preferences. Yet, it posits that executives in public firms without dominant blockholders may have the power to influence compensation decisions in their favor and thus hamper optimal contracting from a shareholder perspective.<sup>19</sup> From this vantage, a plausible route to trim managers' *de facto* control over remuneration decisions would alleviate small shareholders collective action and information problems by putting executive compensation schemes or even individual compensation packages up for properly informed voting at the shareholder meeting.<sup>20</sup> Indeed surveys show that institutional investors exhibit a great interest in proper incentive compensation<sup>21</sup> and should thus benefit from the voting rights they become vested with,<sup>22</sup> although the guidance by information intermediaries should play a piv-

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*the Principal Agent Problem*, 51 *ECONOMETRICA* 7 (1983); Dilip Mookherjee, *Optimal Incentive Schemes with many Agents*, 51 *REV. ECON. STUD.* 433 (1984); Michael C. Jensen & Kevin J. Murphy, *Performance pay and top-management incentives*, 98 *J. POL. ECON.* 225 (1990); the article that shaped the dominant mindset during the 1990s is Michael C. Jensen & Kevin J. Murphy, *CEO Incentives – Its Not How Much You Pay, But How*, 68 *HARV. BUS. REV.* 138 (May/June 1990). For an overview cf. William Bratton, *Agency Theory and Incentive Compensation*, in *RESEARCH HANDBOOK ON EXECUTIVE PAY* 101 (Randall S. Thomas & Jennifer G. Hill eds., 2012).

<sup>19</sup> Lucian A. Bebchuk, Jesse M. Fried & David Walker, *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 *U. CHI. L. REV.* 751 (2002); Lucian A. Bebchuk & Jesse M. Fried, *Stealth Compensation as an Agency Problem*, 17 *J. ECON. PERSPECT.* 71 (2003); LUCIAN A. BEBCHUK & JESSE M. FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISES OF EXECUTIVE COMPENSATION* (2004); William W. Bratton, *The Academic Tournament Over Executive Compensation*, 93 *CAL. L. REV.* 1557 (2005); Arthur Levitt, *Corporate Culture and the Problem of Executive Compensation*, 30 *J. CORP. L.* 749 (2005). For a critical review of the main posits of this strand of literature see John E. Core, Wayne R. Guay & Randall S. Thomas, *Is U.S. CEO Compensation Inefficient Pay Without Performance?*, 103 *MICH. L. REV.* 1142 (2005).

<sup>20</sup> For statements of this position see for instance BRIAN CHEFFINS, *COMPANY LAW* 678 (1997); Mark J. Loewenstein, *The Conundrum of Executive Compensation*, 35 *WAKE FOREST L. REV.* 1, 25 et seq. (2000); BEBCHUK & FRIED, *supra* note 19, at 195; Lucian A. Bebchuk & Jesse M. Fried, *Pay without Performance: Overview of the Issues*, 30 *J. CORP. L.* 647, 672 (2005); Randall S. Thomas, Alan R. Palmiter & James F. Cotter, *Dodd-Frank's Say on Pay: Will it Lead to a Greater Role for Shareholders in Corporate Governance?*, 97 *CORNELL L. REV.* 1213, 1232 (2012)

<sup>21</sup> Cf. Joseph A. McCahery, Zacharias Sautner & Laura T. Starks, *Behind the Scenes: The Corporate Governance Preferences of Institutional Investors* 18 (Tilburg Law School Research Paper No. 010/2010) available at <http://ssrn.com/abstract=1571046>.

<sup>22</sup> See also John Armour, *Enforcement Strategies in UK Corporate Governance: A Roadmap and Empirical Assessment* 6 (Eur. Corp. Governance Inst. Law Working Paper 106, 2008) available at <http://ssrn.com/abstract=1133542>, noting that shareholder voting may con-



otal role in their compensation decisions as well.<sup>23</sup> However, diverging risk-preferences among shareholders and the costs of bargaining between managers and shareholders have been brought forward early in the debate as arguments against direct shareholder involvement and for establishing strong bargaining agents instead.<sup>24</sup>

## 2.2 SAY ON PAY AND POLICY GOALS NOT PRIMARILY ROOTED IN SHAREHOLDER INTERESTS

Regardless of the merits say on pay may have in attenuating agency conflicts between managers and shareholders, it represents an institutional arrangement that by its very design can only exhibit knock-on effects if the policy maker's goal is not only to align investors and executives interests but to serve a broader distributive agenda that seeks to curb total compensation levels in the interest of other corporate stakeholders.<sup>25</sup> Even where low approval rates or even rejection of compensation packages may be regarded as shareholder "outrage",<sup>26</sup> such insurrection may have nothing to do with total compensation levels – as long as they do not reach proportions that would divert a noticeable slice of corporate profits into managers' pockets. It is indicative that prominent proponents of high-powered incentive compensation as a tool to mitigate agency problems posited in the title of one of their articles that executive

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stitute a form of informal private enforcement of standards of conduct expected to be observed by the firm's management.

<sup>23</sup> On the importance of proxy advisors' input for institutional investors in pertinent respect across jurisdictions *see* Thomas and Van der Elst *supra* note 2, at 4. With regard to the U.S. situation post Dodd-Frank and the relevance of ISS-recommendations in particular Thomas, Palmiter & Cotter, *supra* note 20 at 1255

<sup>24</sup> Jeffrey N. Gordon, *Executive Compensation: If There's A Problem, What's the Remedy? The Case for "Compensation Discussion and Analysis*, 30 J. Corp. L. 675, 699 (2005); Jeffrey N. Gordon, "Say on Pay": *Cautionary Notes on the U.K. Experience and the Case for Shareholder Opt-In*, 46 HARV. J. ON LEGIS. 323, 329 et seq. (2009). For another opposing position denying say on pay's benefits Stephen M. Bainbridge, *Is Say on Pay Justified*, 32 REG. 42 (2009).

<sup>25</sup> For a critical assessment of common regulatory strategies other than say on pay to decrease the level of executive compensation (disclosure, taxation) *see* Kevin J. Murphy, *The Politics of Pay: A Legislative History of Executive Compensation*, in THE RESEARCH HANDBOOK OF EXECUTIVE PAY 11, 11 (Randall S. Thomas & Jennifer G. Hill eds., 2012). For the political reasons that militate in favor of such regulatory initiatives that may include say on pay Thomas & Van der Elst *supra* note 2, at 3-4.

<sup>26</sup> The term was coined by Paul Krugman, *The Outrage Constraint*, N.Y. Times, August 23, 2002, at A17 and later taken-up in the literature, *see* for instance Bebchuk & Fried, *supra* note at 65; Kym Sheehan, *Is the Outrage Constraint an Effective Constraint on Executive Remuneration? Evidence from the UK and Preliminary Results from Australia* (Working Paper 2007) available at <http://ssrn.com/abstract=974965>.

compensation “is not about how much you pay, but how”.<sup>27</sup> In fact, sophisticated shareholders seem to adhere to this motto.<sup>28</sup>

In a similar vein, it is quite plausible that say on pay-regimes cannot serve financial stability concerns: diversified shareholders are risk-neutral and will thus push management to take on any positive net-present-value project. As a consequence, shareholder involvement will not automatically result in less risky banks, even where implicit government guarantees are successfully resolved. Even to the contrary, it might make matters worse. Since part of banks’ debt is not priced in an adequate, risk-adjusted manner because it is protected by deposit insurance and implicit government guarantees,<sup>29</sup> risk-neutral shareholders are willing to incentivize managers to engage in risk-shifting activities at the expense of taxpayers by taking on excessively risky projects. Yet, the composition of our dataset does not permit to further explore this hypothesis.

### 2.3 PRIOR EMPIRICAL ANALYSES

Most empirical surveys test the impact of say on pay in the U.K., certainly not least because this jurisdiction was the front runner of the movement. Some studies gauge shareholders’ general assessment of the rule by observing share price reactions to its announcement,<sup>30</sup> most studies are mainly concerned with the driving forces behind shareholder dissent and/or low approval rates<sup>31</sup> and their effect on executive compensation. Some studies investigate the direct link between negative voting turnouts and changes to individual employment

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<sup>27</sup> See Jensen & Meckling, *supra* note 18.

<sup>28</sup> Thomas, Palmiter & Cotter, *supra* note 20 at 1257 report that U.S. shareholders, despite the popular criticism took no offence at the level of executive compensation in the 2011 proxy season.

<sup>29</sup> For a description see Tobias H. Tröger, *Organizational Choices of Banks and the Effective Supervision of Transnational Financial Institutions*, 48 TEX. INT’L L.J. 177, 187-90 (2013).

<sup>30</sup> Fabrizio Ferri & David A. Maber, *Say on Pay Votes and CEO Compensation: Evidence from the U.K.*, 17 REV. FIN. 527, 532-35 (2013).

<sup>31</sup> Mary Ellen Carter & Valentina L. Zamora, *Shareholder Remuneration Votes and CEO Compensation Design* (Working Paper 2009) available at <http://ssrn.com/abstract=1004061>; Walid Alissa, *Boards’ Response to Shareholders’ Dissatisfaction: The Case of Shareholders’ Say on Pay in the UK* (Working Paper 2009) available at <http://ssrn.com/abstract=1412880>; Martin Conyon & Graham Sadler, *Shareholder Voting and Directors’ Remuneration Report Legislation: Say on Pay in the UK*, 18 CORP. GOVERNANCE 296, 303-4 (2010); Kym Sheehan, *Say on Pay and the Outrage Constraint*, in RESEARCH HANDBOOK ON EXECUTIVE PAY 255, 276-8 (Randall S. Thomas & Jennifer G. Hill eds., 2012).

contracts.<sup>32</sup> Others look at general and persistent changes in remuneration practices that could indicate a closer alignment of managers' incentives with shareholder interests as a result of the introduction of the U.K. say on pay-regime. These studies generally find (weak) evidence for such a link.<sup>33</sup>

Similar research also scrutinized the Australian situation, looking at both the reasons for low approval rates and observable changes in compensation practices as a reaction.<sup>34</sup>

An empirical study<sup>35</sup> that tries to find the determinants that drive negative votes in U.S. say on pay-decisions considers *inter alia* total stock returns as performance measure, but does not analyze a time-series to gauge the medium term effects that the introduction of the say on pay-regime under Dodd-Frank may have.

Finally, a comprehensive study that surveys 38 jurisdictions also looks specifically at the correlation between say on pay and the design of compensation packages, thereby distinguishing carefully between the remuneration of CEOs and that of ordinary board members.<sup>36</sup> The analysis delineates a deceleration in the growth of CEO pay and its consequential approximation to that of ordinary board members.

Our study is similar to the strand of research that tries to measure say on pay's medium term effect on general compensation practices. We use a hand-collected dataset to analyze the German natural example that took place in a specific institutional setting. Limiting ourselves to one jurisdiction allows us to proxy some of its idiosyncrasies in more detail and thus shed new light on key hypotheses articulated in the debate. We pay particular attention to the link between say on pays' impact on executive—particularly CEO—compensation and firm performance measures and investigate the importance of ownership structures.

### 3 DATA AND METHODOLOGY

#### 3.1 SAMPLE DESCRIPTION

In order to investigate the potential implications of say on pay on management remuneration in Germany we hand-collected a data set for Germany's major firms, *i.e.* those included in the main stock market index, the DAX 30, for the years 2006-2012. Rather than

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<sup>32</sup> Ferri & Maber, *supra* note 30 at 535-47.

<sup>33</sup> Ferri & Maber, *supra* note 30 at 547-59; Conyon & Sadler, *supra* note 31 at 304-8; Carter & Zamora, *supra* note 31; Alissa, *supra* note 31; Sheehan, *supra* note 31 at 265-9.

<sup>34</sup> Sheehan, *supra* note 31 at 265-9.

<sup>35</sup> James F. Cotter, Alan R. Palmiter & Randall S. Thomas, *The First Year of Say-on-Pay Under Dodd-Frank: An Empirical Analysis and Look Forward*, 81 GEO. WASH. L. REV. 967 (2013).

<sup>36</sup> Correa & Lel, *supra* note 2.

focusing exclusively on CEO remuneration we collected data for all members of the management board for the whole period under investigation. In order to identify *ceteris paribus* trends that are attributable to the introduction of say on pay, we concentrate on those companies that were included in the DAX30 during the entire period and thus end up with 25 companies in our sample. This gives us information on 1262 remuneration packages for these 25 companies with an average size of the management board of 7.2 members, with a minimum of 4 and a maximum of 11 managers (including the CEO). The composition of our company base traces very closely the structure of the German economy with five financial companies (two banks, a financial exchange, and two insurance companies), three car manufacturers as well as six pharmaceutical companies (including chemical firms as well as medicine technique companies). The remaining firms are mainly other manufacturing companies.

Our data sample comprises information on management compensation, firm performance, general firm characteristics (such as size and industry to which the companies belong) as well as information on ownership structures. The information on management remuneration was taken from the firms' annual reports for the respective years. As a consequence of a 2005 overhaul of the relevant accounting standards,<sup>37</sup> executive compensation packages are reported on an individual basis for each member of the management board and have to be itemized with regard to fixed, variable and long-term incentive components. Hence, we are able to track executive compensation over time. The information on say on pay-votes (including the percentage turnouts of these votes in favor or against the respective proposals) are also taken from the company accounts. We checked for completeness by consulting the firms' websites.<sup>38</sup> The general firm characteristics, such as size and market-to-book-ratios are drawn from Datastream for the respective years. In order to get the data on ownership structures we have made use of Commerzbank's compendium "Wer gehört zu wem".<sup>39</sup> This data source comprises detailed information on ownership structures of German firms and their changes over time. We impound new information (since 2010) on significant holdings from the companies' register.<sup>40</sup>

## 3.2 DESCRIPTION OF VARIABLES

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<sup>37</sup> Gesetz über die Offenlegung der Vorstandsvergütungen (VorstOG) [Act on Disclosure of Executive Compensation], Aug. 3, 2005, BGBl. I at 2267.

<sup>38</sup> Pursuant to AktG, § 130(6), German listed companies have to post detailed information on the votes (yes, no, abstain) for each resolution on their website within seven days. The pertinent information is also filed with the register, *see* AktG, § 130(5).

<sup>39</sup> COMMERZBANK, WER GEHÖRT ZU WEM [WHO BELONGS TO WHOM] (2010).

<sup>40</sup> Wertpapierhandelsgesetz [WpHG, Securities Trading Act], July 26, 1994, BGBl. I at 2708, § 21(1) compels any person whose shareholdings reaches, exceeds or falls short of 3%, 5%, 10%, 15%, 20%, 25%, 30%, 50%, or 75% of the voting rights in a listed company to disclose this fact immediately to the company and the supervisory authority. The pertinent notifications are then filed with the company register and thus made public.

The compensation reports as mandatory items of the company accounts provide detailed information on the remuneration of individual members of the management board.<sup>41</sup> Companies report not only the total level of compensation but also its structure in considerable detail. In particular, the different types of variable pay such as cash bonuses, stock options and long-term incentive plans are disclosed. However, this granular reporting makes comparisons across companies and over time quite difficult: not only do the observed compensation structures diverge materially but also do the ways of reporting change over time because firms do not have to comply with a prescribed form that would standardize disclosure. Hence, despite the risk of sacrificing some granularity, we decided to focus on the three main pillars of the compensation packages: fixed pay, variable remuneration and pension benefits. While fixed payments and pension contributions paid for the members of the management board are rather uniform across time and companies, there is quite some variation with regard to variable pay across time and companies which should be kept in mind.

By looking at these three elements of managers' remuneration packages we cover the main elements of monetary compensation and incentive schemes: fixed pay reflecting the overall participation constraint of management board members, variable pay as pay-for-performance (aligning the objectives of management and shareholders by incentivizing managers to provide effort),<sup>42</sup> and pension contributions paid for management board members as inside debt (to provide incentives to reduce risk and avoid default<sup>43</sup>).

We therefore concentrate on four variables. The first variable (FIX) reflects the fixed payments of the members of the management board whereas the second variable (VARPAY) is the sum of all variable compensation of the respective manager in a given year. Where incentive plans were designed for more than one year we divided the total amount reported equally over the respective years and added the split-parts to VARPAY for each year. Our third variable (TEXP) is simply adding up these two elements and hence stands for total yearly payments ex pensions. Given that we have missing observations for pension contributions in a number of cases we rely on this variable as our main measure of total compensation. In order to distinguish between CEOs and other members of the management board we created a variable TEXPCEO measuring total yearly payments ex pensions for the CEO of the respective company. Last but not least, our PENSION variable denotes the pension contribution paid for the respective member of the management board. Table 1 gives a first overview of the main realizations of these variables.

Table 1: Overview on remuneration of DAX30 management board members (in TEUR)

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<sup>41</sup> See *supra* at note 37.

<sup>42</sup> See e.g. Michael C. Jensen & Kevin J. Murphy, *Performance pay and top-management incentives*, 98 J. POL. ECON. 225-264 (1990):.

<sup>43</sup> See Rangarjan K. Sundaram, & David L. Yermack, *Pay me later: Inside debt and its role in managerial compensation*, 62 J. FIN. 1551-1588 (2007).

	Mean	Median	Min	Max	No. of observ
FIX	726.2	704.0	0.4	4497	1237
TEXP	2634.8	2313.1	0	17,500	1251
TEXPCEO	4276.9	3610.1	0	17,500	176
VARPAY	1901,6	1613.6	0	15,600	1237
PENSION	367.1	280.0	0	3695	1100

These numbers indicate with respect to pay structure that pay-for-performance related income sources are on average the most important remuneration element for members of the management board. They exceed clearly the sum of fixed payments and pension contributions that managers are afforded. Surprisingly, pension contributions paid for management board members are small. With respect to variations across management board members less surprisingly, CEO pay exceeds that of other management board members by far. This difference is also of high statistical significance, which indicates that the German system incrementally converges towards the Anglo-Saxon model of strong and distinct chief executives.<sup>44</sup> We observe some skewedness of the distribution with some outliers distorting the picture. Yet again, if we compare the mean and median of the different variables we find that this skewedness is not very pronounced. Hence, we can state that there clearly is variation—arguably explicable with the degree to which German firms seek to mimic the Anglo-Saxon governance arrangement—with some (but not many) highly paid top managers (all CEOs), but that this variation is not very wide. Quite noteworthy, with respect to the overall size of the pay-check we observe only six data points (among all 1237) where TEXP exceeded 10 mill. Euro. Moreover, these observations comprise 4 different CEOs.

Furthermore, we collected data to define a number of variables reflecting firm characteristics and firm performance, operative as well as stock price developments. Since we aim to relate these variables to the variation in management board compensation and investigate whether we find an effect of say on pay votes after including these variables as control, we focus on those that play the main role in designing compensation packages for top managers. With respect to firm characteristics we chose a measure for size, namely total assets (TA) as well as the firms' valuation proxied by the market-to-book ratio (MTB) and industry dummies (for the financial, the car and the pharmaceutical industry). We measure firm performance by their net-earnings on a cashflow basis (EBIT) as well as return-on-assets earned in the respective year (ROA) defined as EBIT over TA. Stock price movements (SHARECH) are measured on a year-to-year basis (end of year). We also looked into other firm characteris-

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<sup>44</sup> Within the traditional German system of corporate governance, the clout of the chairman of the management board (“Vorstandsvorsitzender”) was a far cry from that of a U.S. CEO. His role as a *primus inter pares* is reflected for instance in AktG § 77(1) and 78(2) that prescribe joint decision making and representation of the corporation by all members of the management board as the default rule.

tics as well as performance measures but the variables ultimately used turned out to have the closest relation to management compensation. The realizations of these variables are depicted in Table 2.

In order to check to what extent ownership concentration could function as a way to counterbalance managerial control<sup>45</sup> and could thus substitute for a German-style say on pay regulation we looked into the ownership concentration in the companies under scrutiny. In order to measure the concentration of ownership (OC) we constructed and used a measure of the role of blockholders. This variable depicts the sum of all shares possessed by shareholders which own individually more than three percent of all shares of the company. The intuition is that even a minority blockholder has some momentum to influence the supervisory board's determination of management compensation packages that comes close to the impact of voluntary, non-binding say on pay-votes. The realization of this variable is described in Table 2, too.

Table 2: Summary statistics of firm characteristics, performance and ownership concentration

	Mean	Median	Min	Max	No. of observ.
TA (in bill €)	232	91.5	2.8	2190	1262
MTB	1.9	1.53	.18	10.23	1262
EBIT (in bill. €)	4.65	3.71	-3.89	26.9	1262
ROA	.060	.053	-.047	.357	1262
SHARECH	.053	0.045	-.881	3.51	1075
OC	.246	.241	0	0.63	1262

Table 2 indicates that there is substantial variation in firm characteristics, performance and ownership structure. This indicates on the one hand that the DAX30 companies differ, in pertinent respect, to a large extent among themselves. But as we will show in the next step, there is also substantial variation, especially with respect to profitability, over time.

Before we turn to this analysis we comment on the say on pay- votes in the DAX30 companies that occurred after the 2009 ammendment of the AktG. All companies in our data sample had a vote on management board remuneration in 2010. In 2011 and 2012 these votes took only place occasionally. We have constructed a variable (SOP) which documents the

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<sup>45</sup> For a theoretical discussion see Patrick Bolton & Ernst-Ludwig von Thadden, Blocks, liquidity, and corporate control, 53 J. Fin. 1-25 (1998).

acceptance rate of the votes in the shareholder meeting. In order to avoid this variable to be biased due to time periods and companies in which no votes have taken place we use the percentage points of positive votes in occasions where votes actually take place and set it to 100 in all other cases. We observe 34 (out of 150) datapoints with sayon pay-votes. Most of these resolutions had very high acceptance rates, most of them above 85%, many of them even above 95%.<sup>46</sup> There are only three exceptions in which compensation schemes received lower acceptance ratios: Deutsche Börse in 2010 with an acceptance rate of 52.7%, Deutsche Bank with 58.2% in the same year and SAP in 2012 with 65.6%. We explore two alternative hypotheses to explain these findings. The first hypothesis is that relatively lower acceptance ratios lead to an adjustment (reduction) in the remuneration package.<sup>47</sup> We test this with our SOP variable. The second, alternative hypothesis is that the supervisory board<sup>48</sup> anticipates the mood of shareholders and adjusts remuneration accordingly where it senses discontent.<sup>49</sup> This would lead us to expect significant reductions in compensation in 2010, the year in which say on pay votes took place in all companies in our sample, if the widespread perception of managers who up to then serviced themselves from the companies' coffers was indeed true.<sup>50</sup> We test this later on with a dummy variable for 2010.

Before we turn to these tests, we explore the relationship between compensation and firm characteristics and structures in a univariate setting.

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<sup>46</sup> This is in line with the findings across jurisdictions in Thomas & Van der Elst *supra* note 2, at 4.

<sup>47</sup> This accords with similar findings in empirical studies of the U.K. situation: Ferri & Marber, *supra* note **Fehler! Textmarke nicht definiert.** at 529 who find a “significant increase in the sensitivity of CEO pay to poor performance” as a result of high shareholder discontent; Carter & Zamora, *supra* note 31 at 24 find that boards respond to sizeable dissent by decelerating compensation increases relative to competitors and curbing diluting stock option grants; Alissa, *supra* note 31 at 26-9 finds no evidence for a change in compensation practices but identifies replacement of CEOs as an alternative response to shareholder dissent; conversely, Conyon & Sadler, *supra* note 31 at 304 find only “little evidence of a relation between CEO pay and shareholder dissent”. Our first hypothesis also conforms with anecdotal evidence in the U.S., although some incidents suggest that companies also stay the course and blame misinformed proxy-advisors for negative votes, Thomas, Palmiter & Cotter *supra* note 20, at 1260; Thomas & Van der Elst *supra* note 2, at 11.

<sup>48</sup> Pursuant AktG § 87 the supervisory board is competent to determine the compensation of individual board members thereby adhering to several substantive principles.

<sup>49</sup> A similar proposition is made in Ferri & Marber, *supra* note **Fehler! Textmarke nicht definiert.** at 546 regarding the removal of long notice periods for the termination of board members' employment contracts that proved a source of shareholder discontent in the U.K.

<sup>50</sup> For an influential analysis of the U.S. situation that follows this line of reasoning *see supra* note 19.



## 4 EMPIRICAL RESULTS

### 4.1 DESCRIPTIVE ANALYSIS

As a first step of our analysis of the determinants of the remuneration (level and structure) we investigate the total level of compensation as well as its performance-based fraction as a function of firm performance. We use Figure 1 to depict this relationship. Figure 1 plots the means of three main payment variables (TEXP, TEXPCEO and VARPAY) *vis-à-vis* the key performance measures EBIT and ROA.

Figure 1: Relation between Financial Performance and Compensation

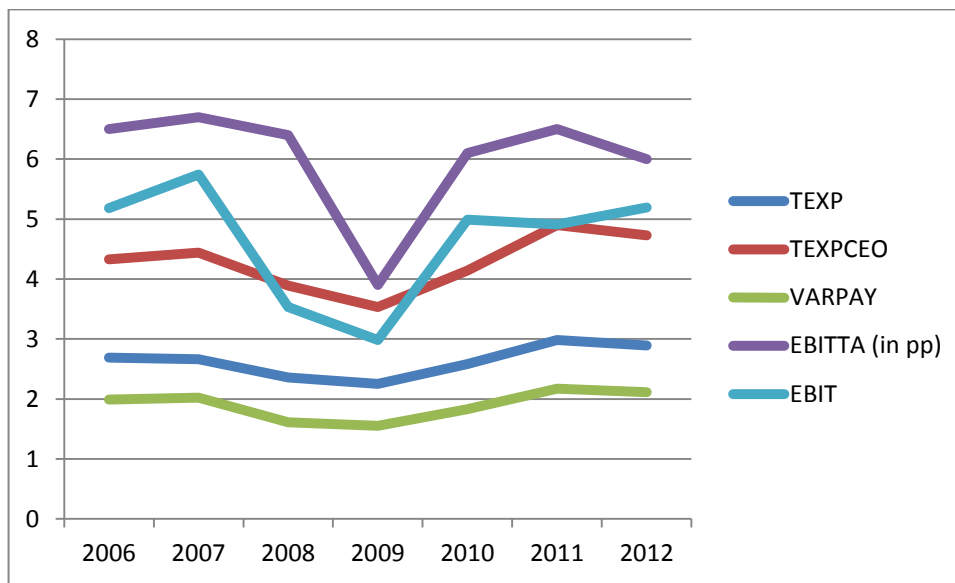


Figure 1 indicates that there is a clear-cut relation between firm performance and the compensation of management board members. The observable link is most pronounced with respect to CEO pay. But it is also present (in a univariate sense) with respect to other members of the management board.<sup>51</sup> This illustration already reveals a number of key insights.

First, it appears to be the case that over the entire period of our analysis there is at best only a slight upside trend in top management compensation. When we compare the 2006 figures with the ones in 2012 we observe a nominal increase in total compensation ex pensions in line with inflation. When looking into the numbers for pension contributions paid for members of the management board plus the fixed payments pretty much the same picture emerges. Whereas the mean of pension contribution paid for top managers was unchanged between 2006 and 2012, the mean of base salaries rose from 0.7 mill. € to 0.84 mill €. Added together, the two figures show an average increase in line with inflation (and below the average increase in employee income in Germany) of about 10% over the entire time period.

<sup>51</sup> To some extent, the different scales of the variables limit the visibility of this interrelation in Figure 1.

Second, Figure 1 indicates the existence of a rather pronounced sensitivity of variable management pay to firm performance. This is most obvious for CEO pay but seems to be present also for the other members of the management board. The correlation coefficient between *TEXP* (*TEXPCEO*) and *EBITTA* is an astonishing 0.215 (0.217) an even higher one with respect to *EBIT* (0.35 and 0.43, respectively). We investigate this relation in a multivariate setting in the next subsection.

Last but not least, we conjecture at this stage that management board pay has not been removed from economic developments (neither at the macro-level nor at the company level). Whether this conjecture survives a more detailed, multivariate analysis which allows to control for other factors is the subject of the next section. There, we also aim to look into the detailed implications of say on pay regulation.

## 4.2 MULTIVARIATE TESTS

Up to now we did not sufficiently take the panel structure of our data set into account. Hence, the aim of this subsection is to exploit the variation in the cross-section as well as over time simultaneously. We run linear regressions on our panel data set while taking the different compensation variables as dependent variables. This includes our two variables measuring total compensation (we always exclude pensions in order to avoid losing too many observations due to missings) as well as our variable and fixed pay variables. We proceed in various steps. In the first one, we aim to explain the compensation variables by using firm characteristics and firm operative performance as well as ownership structure as explanatory variables in order to check to which extent compensation packages are aligned with the objective function of shareholders who seek to maximize the return on their investment. In a second step, we test our two hypotheses regarding the impact of say on pay regulation by including our *SOP* variable as well as the dummy variable for 2010. Finally, we undertake a robustness check by including also the investigated firms' financial performance using our variable *SHARECH* that measures annual changes in share prices. Our random effects estimation hence has the following structure:

$$Pay_{it} = \alpha + \sum \beta_j X_j + Controls + \mu_{it}$$

with our compensation variables forming the right-hand-side variables and the  $X_j$  standing for our explanatory variables as described above. The error term is displayed by  $\mu_{it}$ .

Tables 3 and 4 summarize our findings. As a further robustness test we have undertaken firm-fixed effect estimations which, however, left our findings rather unchanged. This indicates that our measures for firm characteristics take up most of the variation across firms.

Table 3: The impact of say on pay on total compensation

We estimate linear regressions on our panel data set. The signs of the estimated coefficients are displayed with plus and minus signs. The statistical significance of the respective coefficient is denoted with stars whereby \*(\*\*) stands for significance at the 10% (5%) level. Statistical significance at the 1% level is indicated by \*\*\*.

	TEXP				TEXPCEO			
	M1	M2	M3	M4	M1	M2	M3	M4
Trend	***	+	**	***	+	+	+	+
ROA	***	***	***	***	***	***	***	**
EBIT	***	***	***	**	***	***	**	***
TA	***	***	***	***	**	**	**	**
OC	-	+	+	-	+	+	+	+
SOP		***		***		+		-
DUMMY10			-	***			-	*
SHARECH				+				+
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observ	1237	1237	1237	1051	176	176	176	162

The most obvious result of our regression analysis is without doubt that total compensation of the members of the management board in Germany's Dax30 companies is strongly influenced by firm structure and firm performance. This holds true for CEOs as well as for other members of the management board. On the one hand, larger firms pay higher salaries. This is very much in line with the literature.<sup>52</sup> Furthermore, firm performance plays an important role. The effects are not only statistically highly significant but also economically pronounced. For every thousand Euros of EBIT, the average management board members receives roughly 15 Eurocents, the CEO even twice as much. For the entire management board an increase in EBIT by a thousand Euros increases their salary by more than one Euro. Pretty much the same holds true with respect to the ROA variable. Hence, we find that the compensation packages of the members of the DAX30 management boards are positively aligned with the objectives of value maximizing shareholders. This alignment takes place mainly via operative performance measures; stock price changes seem to play a subordinate role. The same is true with respect to ownership structure which seems to have at best little if

<sup>52</sup> See Peter Kostiuk, *Firm Size and Executive Compensation*, 25 J. HUMAN RES. 90-105 (1990); Edward Lazear, Sherwin Rosen, Marianne Bertrand & Kevin Hallock, *The Gender Gap in Top Corporate Jobs*, 55 INDUS. & LABOR RELATIONS REV. 3-21 (2001).

no influence on the compensation of management. The ownership variable is basically never statistically significant (the only exception being the effect in model M4 in the regression of fixed compensation). As an aside we find that the industry dummies clearly indicate that at least in the time period of our sample the car industry paid significantly higher salaries (the industry dummy for the car industry is persistently positive and highly significant) whereas the financial industry and the pharmaceutical industry paid their management board members significantly less. To be sure, this observation is driven in part by Commerzbank, which was bailed-out by the German financial market stabilization fund in 2008 and 2009. The government rescue subjected the bank to a remuneration cap of 500.000 € for its top personnel.<sup>53</sup> We created a dummy variable to test the impact of these firm-specific developments on the financial industry in our sample. Although the dummy variable is negative and statistically highly significant, Commerzbank is not the sole driver for our results, because the financial industry coefficient remains negative and statistically significant for the other financials in our sample. The same is true for all other results.

With respect to the impact of the German say on pay regulation and the subsequent votes on compensation schemes, the picture that our analysis yields is rather blurry. Our SOP variable is either insignificant (with regard to total compensation of the CEO) or when having a statistically significant effect points in the opposite direction as the one stated in our first hypothesis. The negative sign of the SOP variable in our regression indicates that a lower voting outcome is associated with a subsequently higher compensation of the other members of the management board. A potential rationale behind this finding is that our SOP variable arguably picks up the developments in the financial industry (note that a lot of the variation comes from the low voting outcome with Deutsche Bank and Deutsche Börse).

However, we find strong support for our second hypothesis concerning say on pay regulation and its impact on total pay. The DUMMY10 variable is always negative and statistically significant in models 4 for total pay of the entire management board as well as for CEOs. This supports our hypothesis that say on pay was anticipated by supervisory boards and thus lead to lower salaries for CEO and management board members in 2010 even after controlling for firm characteristics and performance. To be sure, although the supervisory board is competent to determine the remuneration of the members of executive board when they are appointed,<sup>54</sup> it basically lacks the power to interfere unilaterally with existing employment contracts without cause. Hence, it is inconceivable that with a view to the upcoming 2010 say on pay-votes supervisory boards reduced executive compensation packages universally. However, at least for those management board members who were (re)appointed around

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<sup>53</sup> The Fund took a silent partnership interest in December 2008 and a 25% equity stake in January 2009 which triggered the remuneration limits that lasted until the government support was ultimately redeemed in 2013. Cf. Gesetz zur Errichtung eines Finanzmarktstabilisierungsfonds [Act Establishing a Financial Market Stabilization Fund], Oct. 17, 2008, BGBl. I at 1982, § 10(2b)(1).

<sup>54</sup> AktG, § 84(1)(1).

the promulgation of the VorstAG<sup>55</sup> compensation arrangements designed with a view to the anticipated shareholder polls are plausible. It is noteworthy in this respect that we observe some variation in fixed pay over time for the same individuals, *i.e.* the variation identified in total compensation is not exclusively performance driven. The latter gives us confidence to presume that the 2010 dip in executive pay did not accidentally precede the first wave of German say on pay-resolutions and could be better explained by other determinants. Despite the sensitivity of executive compensation to firm performance, our analysis suggests that it was not the recessionary state of the global and—albeit to a lesser degree—the German economy that accounted for the pertinent observations and the high acceptance rates in say on pay-votes.

Table 4: The impact of say on pay on fixed and variable compensation

We estimate linear regressions on our panel data set. The signs of the estimated coefficients are displayed with plus and minus signs. The statistical significance of the respective coefficient is denoted with stars whereby \*(\*\*) stands for significance at the 10% (5%) level. Statistical significance at the 1% level is indicated by \*\*\*.

	VARPAY				FIX			
	M1	M2	M3	M4	M1	M2	M3	M4
Trend	+	+	+*	+**	+***	+***	+***	+***
ROA	+***	+***	+***	+***	+***	+***	+***	-***
EBIT	+***	+***	+***	+**	+***	+***	+**	+**
TA	+**	+**	+**	+**	+***	+***	+***	+**
OC	+	+	+	-	-	-	-	-*
SOP		-***		-***		-*		-**
DUMMY10			-	-***			-	-
SHARECH				+*				+
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observ	1237	1237	1237	1051	1237	1237	1237	1051

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<sup>55</sup> The maximum tenure permitted by law is 5 years which regularly makes for deeply staggered management boards. The important takeaway for our analysis is thus that every year about one fifth of the management board should be up for (re-)appointment.

The regressions on variable pay and fixed pay clearly point in the same direction. The only main difference is the very consistent and strong impact of the trend variable and the size variable on fixed pay. Especially the former is in line with the findings in the literature.<sup>56</sup>

## 5 CONCLUSION

In a nutshell, our main findings can be summarized as follows. First, we observe that the compensation packages of management board members of Germany's DAX30-firms are quite closely linked to key performance measures such as return-on-assets and EBIT. In addition, we find that salaries increase with the size of the company. Second, our analysis indicates that ownership concentration has no significant effect on compensation, which can be read as support of the view that managerial self-serving by usurping the payroll is largely absent even where companies exhibit dispersed shareownership. Third, and most important for our topic, our findings suggest that the two-tier system seems to matter a lot when it comes to compensation. Our analysis implies that this control layer consolidated in organizational law works quite well when it comes to aligning compensation more closely with shareholder value and firm performance. However, it would be misleading to state that we see no significant impact of the introduction of the German say on pay-regime. Our findings suggest that if anything supervisory boards anticipate shareholder-behavior, because in 2010, i.e. the year that shareholders could express their evaluation of compensation schemes for the first time and at all firms in the sample, remuneration was noticeably reduced—it went down even after we control for performance measures—which also contributed to the high acceptance rates in most of the 2010 votes. It is also noteworthy, that in subsequent years, shareholders were less frequently consulted by say on pay-resolutions.

These findings cast a somewhat dubious light on the recent Commission proposals to introduce a mandatory and binding say on pay-vote in all E.U. jurisdictions.<sup>57</sup> Our analysis lends some plausibility to the critique that this form of direct shareholder involvement would damage an established and well-functioning regime that largely adjusts management incentives to shareholders' objective function through incentive compensation schemes. This accords with the view, that the supervisory board serves as a well-informed bargaining agent for (dispersed) shareholders when it comes to negotiating proper incentive contracts.<sup>58</sup> Yet, our results can also be read in a way that mandatory periodic, albeit consultative shareholder involvement could further increase the accountability—of at least—the shareholder representatives on the supervisory board.

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<sup>56</sup> For a general discussion see Lucian A. Bebchuk & Yaniv Grinstein, *The Growth of Executive Pay*, 21 OXFORD REV. ECON. POL'Y 283 (2005).

<sup>57</sup> *Supra* note 1 and *infra* Table 5.

<sup>58</sup> *See supra* 2.1.



Table 5 – Say on Pay regimes across jurisdictions

Jurisdiction	Content			Source of Law
	<i>mandatory</i>	<i>binding</i>	<i>scope</i>	
Australia	yes	no		Introduction of section 250R(2) to the Corporations Act, 2005
	yes	no two-strikes regime: if 25% or more of shareholders vote against a company's remuneration report at two AGMs, the board is subject to a "spill" motion. If the latter receives the support of 50% or more of the company's shareholders, then a separate GM must be called within 90 days at which all directors except for executive directors must stand for re-election	remuneration report for last fiscal year	Corporations Amendment (Improving Accountability on Director and Executive Remuneration) Bill, July 1, 2011, amending section 250R(2) and introducing sections 250U-V to the Corporation Act 2001
Belgium	Yes for all listed and state-owned companies	no	Remuneration report for last fiscal year	The Law on Corporate Governance and Executive Remuneration, April 6, 2010
Canada	no say on pay regulation, voluntary consultation possible			n/a
European Union	Yes	Yes	remuneration policy every three years	Commission Proposal for a revised Shareholders' Rights Directive, Art.



Jurisdiction	Content			Source of Law
	<i>mandatory</i>	<i>binding</i>	<i>scope</i>	
			compliance of actual remuneration with policy required	9a, 9b April 9, 2014, COM(2014) 213 final
	yes	no in case of rejection obligation to explain in the next report, if and how vote has been considered,	<b>remuneration report for past financial year</b>	
<b>France</b>	yes BUT: mere self-regulation based on comply or explain	no in case of rejection board is obliged to consult its remuneration committee and make public what action it intends to take in response	<b>Individual remuneration package</b>	AFEP-MEDEF Code 2010 (self-regulation)  threats of regulatory action were apparently withdrawn as a result of the introduction of the respective provisions in the Code
<b>Germany</b>	no	no	<b>remuneration policy</b>	Gesetz zur Angemessenheit der Vorstandsvergütung (VorstAG), G. v. 31.07.2009 BGBl. I S. 2509 (Nr. 50) inserting AktG, § 120(4)
<b>India</b>	<b>Binding vote</b>			Section 309 Companies Act of 1956
<b>Italy</b>	yes	yes (for banks and insurers)  no	<b>Remuneration report</b> results must be made available to the public online	Bank of Italy Regulation, March 30, 2011, and  ISVAP Regulation, n. 39 June 9,

Jurisdiction	Content			Source of Law
	<i>mandatory</i>	<i>binding</i>	<i>scope</i>	
		(for other listed companies)		2011; Legislative Decree 58/1998, effective Dec 31, 2011
<b>Japan</b>	<b>binding vote</b>			
<b>Middle East</b> (Gulf Corporation Council Countries: Bahrain, Kuwait, Oman, Qatar, Saudi-Arabia, UAE)	<b>No say on pay regulation</b>			
<b>Netherlands</b>	<b>yes</b> BUT: mere self-regulation based on comply or explain	<b>yes</b> BUT: mere self-regulation based on comply or explain	<b>Remuneration policy</b>	Dutch Corporate Governance Code 2004, Best Practice provision II.2.1., II.2.2. (self regulation)
<b>Singapur</b>	<b>No say on pay regulation</b>			
<b>Spain</b>	<b>Non-binding vote</b>			Ley de Economia Sostenible aprobada en Espana, 2011
	<b>Yes</b>	<b>Yes</b>	<b>Individual remuneration of</b>	

Jurisdiction	Content			Source of Law
	<i>mandatory</i>	<i>binding</i>	<i>scope</i>	
Sweden			<b>board members, § 8:23(a), and remuneration guidelines § 7:61</b>	Swedish Companies Act
Switzerland	yes	yes	<b>Individual compensation packages at least once a year</b>	Referendum March 5, 2013, temporarily implemented by Verordnung des Bundesrates gegen übermässige Vergütungen bei börsenkotierten Aktiengesellschaften (VegüV), which entered into force on Jan. 1, 2014, endorsement by Parliament expected in 2014/2015
United Kingdom	yes	no	<b>Annual compensation report</b>	Directors' Remuneration Report Regulations, 2002, amending Companies Act 1985
	yes	yes payments made to directors must be consistent with the policy, otherwise require shareholder approval.	<b>remuneration policy at least every three years</b>	Enterprise and Regulatory Reform Act, Oct. 1, 2013
USA	yes	no	<b>Individual compensation packages at least every three years</b> shareholders bindingly determine voting frequency (every,	Dodd–Frank Wall Street Reform and Consumer Protection Act, §951, July 2010, amending Securities Exchange Act 1934 by adding section 14A

Jurisdiction	Content			Source of Law
	<i>mandatory</i>	<i>binding</i>	<i>scope</i>	
			every other, every three years as available options)	SEC Finale Rule Jan. 25, 2011

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