

This is a repository copy of CEO Pay and Voting Dissent Before and After the Crisis.

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/86818/

Version: Accepted Version

# Article:

Gregory-Smith, I., Thompson, S. and Wright, P.W. (2014) CEO Pay and Voting Dissent Before and After the Crisis. Economic Journal, 124 (574). F22 - F39. ISSN 0013-0133

https://doi.org/10.1111/ecoj.12108

This is the peer reviewed version of the following article: Gregory-Smith, I., Thompson, S. and Wright, P.W. (2014) CEO Pay and Voting Dissent Before and After the Crisis. Economic Journal, 124 (574). F22 - F39, which has been published in final form at https://dx.doi.org/10.1111/ecoj.12108. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving."

#### Reuse

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

#### Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk https://eprints.whiterose.ac.uk/

# CEO PAY AND VOTING DISSENT BEFORE AND AFTER THE CRISIS

Ian Gregory-Smith<sup>\*</sup>, Steve Thompson and Peter W. Wright

For the attention of the typesetter: CEO pay and voting dissent

Say on pay - that is empowering shareholders to vote on the remuneration arrangements of their firm's senior executives - has become an international policy response to the perceived explosion in rewards for top management. In this paper we examine the operation of say in pay in the UK, the country which pioneered its adoption, using the population of non-investment trust companies in the FTSE 350 over the period 2003-2012. We find executive remuneration and dissent on the remuneration committee report are positively correlated. However, the magnitude of this effect is small. We find that dissent plays a role in moderating future executive compensation levels, although this effect is restricted to levels of dissent above 10%, and primarily acting upon the higher quantiles of rewards. We find no evidence of an increased restraining effect of dissent on pay following the onset of the financial crisis.

JEL codes: G30, J30

Since the late 1970s, the increasing level of compensation for senior executives worldwide, relative to average earnings, has been a spectacular empirical regularity.<sup>2</sup> Beginning in the USA and UK, the growth in executive rewards spread across the globe,

<sup>\*</sup>Corresponding author: i.gregory-smith@sheffield.ac.uk; Department of Economics, The University of Sheffield, 9 Mappin Street, Sheffield, S1 4DT, UK. Tel: +44(0)114 222 3458

<sup>&</sup>lt;sup>2</sup>Hill (2012, p.221-2)) documents the convergent trends in executive remuneration despite the persistence of cultural differences between countries, as reflected in the design of executive contracts.

initially to Europe and latterly to developing countries, including recently the BRIC economies of China (Conyon and Ho, 2012), India (Chakrabarti *et al.*, 2012) and Brazil.<sup>3</sup> This growth has been accompanied by widespread debates - both academic and popular - on its causes and consequences. These, in turn, have helped shape a corporate governance reform process whose international diffusion is almost as marked as that of executive pay growth itself.

Corporate governance changes, and those to financial regulation in general, tend to follow financial and business crises (Murphy, 2012; Hill, 2012). Mostly recently, the global financial crisis appears to have stimulated the adoption of 'say on pay' in the USA, Europe and beyond. Say on pay involves the direct empowerment of shareholders in the determination of executive compensation arrangements in their company. This move rests, explicitly or implicitly, on some version of the 'rents capture' hypothesis of corporate control. That is, the proposition of Bebchuk and Fried (2004) and others that suggests executives 'capture' their boards sufficiently to push their own rewards beyond purely market-determined levels. It is consequently assumed that self-interested shareholders will, if offered a low-cost opportunity to voice their concerns, vote to punish excess and that executives, fearful of such retribution, will curtail their own opportunism. Since 2007-2008, numerous countries have either adopted say on pay schemes or strengthened existing ones. These moves have been widely linked to the view that executive pay arrangements encouraged excessive risk-taking, particularly in financial services, and/or protected senior managers from the consequences of such behaviour (Hill, 2012).

Since the UK adopted say on pay in 2003 - almost the first country to do so -it offers a particularly useful test-case on the impact of shareholder voice in pay determination.

<sup>&</sup>lt;sup>3</sup>The Economist (27/1/2011) recently reported that the executives of large companies in Sao Paulo, Brazil, were paid even more than their equivalents in New York and London. http://www.economist.com/node/18010831 viewed on 7/09/2012.

This paper explores the role of shareholder voting in executive pay setting using the population of (non-investment trust) companies in the FTSE 350 over the period 2003-2012. Unlike prior studies (e.g. Conyon and Sadler, 2010; Ferri and Maber, 2012) which use data covering the boom period up to 2007 only, when support for the status quo was perhaps unsurprising, we incorporate the post-crisis years up to and including the so-called 'shareholder spring'<sup>4</sup> votes of 2011-12 votes. Our analysis of shareholder voting suggests that dissent from the remuneration committee's proposals is positively correlated with the level of remuneration. However, the magnitude of this effect remains small, a result consistent with the observed rarity of board defeats on this issue.

Turning to the role of dissent in moderating future executive compensation levels, a more complex picture emerges. While there is a negative correlation between remuneration and the previous year's dissent, this appears to be restricted to levels of dissent above 10%, and primarily acting upon the higher quantiles of rewards. Lower levels of lagged dissent may even encourage higher payments, particularly for those in the higher pay quantiles. Contrary to the media view of a 'shareholder spring' response to the global crisis, we find no evidence of an structural break in the pay-dissent relationship after 2007.

The paper is structured as follows: Section 1. examines say on pay in the context of the debates over executive remuneration and explores the UK institutional setting. Section 2. outlines the sample and data before presenting empirical analyses of shareholder voting and executive remuneration. A brief conclusion follows.

<sup>&</sup>lt;sup>4</sup>Media comment likened the several votes that rejected remuneration committee reports, so overturning the board's wishes, to the 'Arab spring' of 2010-12 which has seen the overthrow of dictatorial regimes across N Africa- see 'Boards wake up to a shareholder spring', Financial Times 4/5/2012accessed at: http://www.ft.com/cms/s/0/a284e414-95ee-11e1-a163-00144feab49a.html, viewed on 7/09/2012.

## 1. Say on Pay and Executive Compensation after the Crisis

The notion that shareholders in a public company should ratify - or even be cognisant with - the rewards of that company's senior executives is a comparatively recent development in corporate evolution. Transparency in the disclosure of remuneration developed slowly. In the USA, for example, it took a series of well-publicised cases of executive salary excess in the aftermath of the Wall Street crash before any mandatory salary and bonus disclosure was introduced, and then only in stages between 1933 and 1935 (see Murphy, 2012, pp.33-34). In the UK disclosure was minimal until a series of corporate governance reforms, beginning with the adoption of the Cadbury report in 1992, gradually extended transparency across the executives' total reward package.

In contrast to the gradual adoption of rewards disclosure, the diffusion of say on pay - that is allowing shareholders a direct voice on senior executive remuneration - has been spectacular. Prior to 2003, when the UK introduced a mandatory non-binding shareholder vote, largely as a by-product of a move to curb perceived overly-generous compensation for ousted CEOs (Conyon and Sadler, 2010), open shareholder involvement in pay was practically unknown. In the subsequent decade, non-binding votes have been adopted in the USA, much of the European Union, Australia, and Canada and beyond. Binding votes are now in place in the Netherlands and Scandinavia (Norway, Sweden and Denmark), in Australia for severance awards and under serious consideration elsewhere, including in the UK.<sup>5</sup> Moreover, the formal impact of a shareholder ballot is not necessarily limited to any majority verdict outcome. In recognition that voting results will tend to favour the status quo, some countries provide for sanctions if dissent reaches levels well below 50%. In Australia, for example, two successive votes of 25% or more against the remuneration recommendations trigger an automatic vote

<sup>&</sup>lt;sup>5</sup>Business Vince Secretary Cable announced plans for mandabinding further disclosure June 2012.tory votes and reward insee: http://online.wsj.com/article/SB10001424052702304765304577478172485959522.html

of confidence in the board of directors (Thomas, 2012, p.253).

## 1.1. Say on Pay and the Executive Pay Debate

Much of the academic debate surrounding the growth in executive remuneration over the past thirty years has polarised around two positions, the optimal contracting view and the managerial power - or rents extraction - school. The former emphasises the role of executive employment contracts, particularly at CEO level, in reconciling the interests of principal-shareholders and their agent-managers. On this view, following Jensen and Murphy (1990), it is not the level of CEO rewards that should generate concern but their relationship to firm performance and ultimately shareholder value. Regulatory, fiscal, political or other impediments to the use of performance-related remuneration are seen as inhibiting the adoption of an efficient value-maximising contract.

In contrast the managerial power view, most comprehensively developed by Bebchuk and Fried (2003, 2004), considers that rent-seeking senior executives 'capture' the remunerationsetting process, usually via compliant non-executive board members. The Bebchuk-Fried model suggests executives maximise remuneration subject to an 'outrage' constraint (Weisbach, 2007). While the precise nature of this constraint is not made explicit, they suggest it is the potential hostility among the firm's shareholders that most directly constrains managers, not least as these shareholders become motivated to support challenges to the board and to endorse actions that may embarrass managers. Bebchuk and Fried (2004) comment:

'The more outrage a compensation arrangement is expected to generate, the more reluctant directors will be to approve it and the more hesitant managers will be to propose it in the first place.'(p.5) As Sheehan (2012) observes, the optimal contracting and managerial power perspectives generate very different responses to say on pay. On the former view (e.g. Jensen and Meckling, 1992) not merely does the board hire executives on the shareholders' behalf, but such a division of responsibilities is seen as efficient in freeing shareholders from the need to acquire and process the information needed to reward and monitor executives. Indeed, from Berle and Means (1932) onward, direct shareholder action was considered dominated by the free-rider inertia position or by exit for shareholders in large firms who have access to liquid stock markets.

By contrast, voting outcomes may be problematic. Critics of say on pay (e.g. Armstrong *et al.*, 2013) argue that *ex post* contractual ratification by shareholders may risk damaging the hiring process and introduces uncertainty into executive rewards. They suggest this will tend to increase remuneration as new hires seek a risk premium against the possibility of a negative vote.<sup>6</sup> Similarly, they argue rewards across the managerial hierarchy may be distorted where only those of the most senior executives are the subject of a ballot. Armstrong *et al.* (2013) cite a negative stock price reaction to the introduction of say on pay in the USA as confirmation that the policy is not generally supportive of shareholders' interests.

In contrast, under the managerial power view, the introduction of say on pay is a relatively low-cost means of strengthening the outrage constraint, especially if the vote is binding and if disclosure is sufficiently detailed for external scrutiny to penetrate any 'camouflage' or obfuscation that obscures non-cash pay elements (Bebchuk and Fried, 2003, 2004). While a similar outcome could be obtained by a shareholder vote against individual directors or even the entire slate, such a move would be more obviously destabilising and hence more costly in terms of shareholder wealth. Nor need shareholders experience high information costs and a corresponding free-rider problem. Proxy

<sup>&</sup>lt;sup>6</sup>Peters and Wagner (2011) report evidence of a compensating differential in CEO remuneration attached to the estimated probability of executive dismissal.

consultants and corporate governance advisers may supply institutional shareholders, covering the bulk of each firm's equity ownership, with unbiased voting advice based on comparative assessments of reward and performance.

Other contributors to the debate recognise the potential for a conflict of interest between shareholders and CEO, without necessarily subscribing to the 'outrage' constraint. Holmström (2005), for example, considers the practice of benchmarking within reasonable norms as more important than outrage in limiting CEO compensation. He regards the board and CEO as separate, if not necessarily equal, decision takers. Faced with a powerful and demanding CEO he suggests that board members will typically use external comparators, e.g. compensation surveys and consultants' recommendations, to determine the level of remuneration. (Indeed, he suggests that the primacy of external comparisons results in a level of compensation that is likely to be closer to the CEO's reservation position than that of the shareholders.) On such a view, the introduction of say on pay would appear likely to further strengthen the board vis-à-vis the CEO.

# 1.2. Say on Pay: Before the Crisis

In both the UK and Australia, the first countries to implement say on pay, it was quickly apparent that the overwhelming majority of ballot outcomes -approximately 99% - favoured the status quo (Sheehan, 2007a,b) with rare defeats for the board tending to be reserved for the most egregious examples of bad practice (Thompson, 2005). In each country the proportion of 'no' votes cast was similarly small, typically averaging less than 4%.<sup>7</sup> Since institutional shareholders, generally locked in to a relatively large holding, may be reluctant to vote against and thereby possibly destabilise management, most analyses have included abstentions in the count of dissenting votes. On this basis

 $<sup>^{7}</sup>$ This is, however, almost twice the level of opposition expressed in general company resolutions over the same period- See Conyon and Sadler (2010).

both Australia and the UK averaged about 8% of dissent prior to 2008.

The initial studies of the determinants of shareholder voting, reviewed in Yermack (2010), suggested a strictly limited impact for executive pay. Carter and Zamora (2009) and Conyon and Sadler (2010) estimated voting models on overlapping samples of UK companies up to 2006 and 2007, respectively. Both reported a statistically significant, if small, impact of (the log of) executive compensation on dissent. Each study also found a negative performance effect, with expressed dissent lower in better performing companies, suggesting that shareholders use say on pay votes to punish, or at least express frustration at, currently unsuccessful executives. Conyon and Sadler (2010) analysed voting on all pay resolutions, not merely votes on the remuneration committee report. Their results also suggested that investors are less likely to support pay resolutions on option, LTIP or equity grants than they are for other pay or non-pay resolutions, a result suggestive of some fears of 'camouflage.'

The underlying expectation of a say on pay policy is clearly that actual or potential shareholder dissent should curb pay excesses. Initial evidence on the impact of dissent on subsequent pay was suggestive of at most a very limited effect. Tabulations by Sheehan (2007b) revealed no effect while a comparison of sub-periods 2000-02 and 2003-05, before and after the UK's introduction of shareholder votes, by Ferri and Maber (2012) found no immediate effect on either the level or growth rate of CEO remuneration. However, they did report an increased CEO pay-performance sensitivity, particularly with respect to poor performance. This greater sensitivity they find to be more pronounced in companies with a high level of dissent in 2003 and where CEOs appear to be over-paid in the first sub-period.<sup>8</sup> Initial results from augmenting executive remuneration regressions with a lagged dissent variable (Carter and Zamora, 2009; Conyon and Sadler, 2010)

<sup>&</sup>lt;sup>8</sup>They recognise that their results may conflate the effects of say on pay's introduction with those of other contemporaneous changes, particularly those intended to curb pay-offs to ousted executives. To explore this further they use US corporations and AIM-listed (i.e. smaller) UK companies as comparator groups and still find greater sensitivity.

failed to reveal any general significant inhibiting effect.

# 1.3. Evidence post-crisis

Until 2008, the overall economic environment was sufficiently benign that it is perhaps unsurprising that broad assent to board policies, including those on executive remuneration, should be the shareholders' default position. However, it has been plausibly argued (e.g. Hill, 2012) that this changed dramatically with the onset of the global financial crisis:

First, compensation systems in financial services have been widely, if controversially blamed for encouraging excessive risk taking and thereby helping to precipitate the banking collapse (see Bebchuk and Spamann (2010), Bell and Van Reenen (2010), but also Fahlenbrach and Stulz (2011).) In many countries this has produced hostile political and media interest in high pay in general.

Second, shareholder activism - which in practice means institutional investor activism - has been actively promoted as a response to the perceived failings of the boom years. In the UK the Financial Reporting Council (FRC, 2010a,b) adopted the 'Stewardship Code', as recommended by the Walker (2009) Review of financial institutional behaviour leading up to the crisis. The Code, largely mirrored by the overall UK Corporate Governance Code, seeks to place responsibility for monitoring on institutional investors and to require these to act collectively to promote good corporate governance, including explicitly acting on executive remuneration (FRC, 2010b, p.1). The investors are also required, on a 'comply or explain' basis, to engage with their companies on such matters.

There is some evidence that the introduction of say on pay had increased the dialogue between investors and their companies even before the crisis. Davis (2008) reports on an institutional survey which suggested that remuneration related contacts between UK companies and their large institutional investors increased three-fold from 2003 to 2006. His interviews led him to conclude that, from 2003, the remuneration committee's need to produce a package to convince shareholders rather than convincing the board increased the frequency of remuneration committee meetings, the contacts with investors, and the use of professional advisers. He also reports, in support of Holmström's position, that some remuneration committee chairs welcomed the advisory vote as a means of standing up to overbearing CEOs (p.11).

Third, the role of the media in shaping perceptions of CEO remuneration is well documented (Dyck and Zingales, 2002; Core *et al.*, 2008) and media hostility to perceived pay excesses in the post-crisis period would be expected to create a fertile climate for publicising individual cases of such excess. Jensen (1979) observed that the role of the mass media is perhaps best considered as provider of entertainment not information, leading to a news treatment which is both selective and biased towards topical prejudice. It seems likely that the threat - or still worse the reality - of extensive media criticism might be expected to increase shareholder hostility to overly-generous pay awards.

Finally, perhaps in reflection of the heightened media interest in executive pay<sup>9</sup>, shareholders' hostility to remuneration committee reports has itself received greater publicity. The media coined the term 'shareholder spring' - by analogy to the 'Arab spring', or popular uprisings in North Africa and the Middle East in 2011-12 - to denote shareholder activism and the expression, at least, has received widespread usage. This has left at least the perception that shareholders adopted a more hawkish position in the post-crisis environment.

 $<sup>^{9}</sup>$ Articles in the UK National Press discussing 'executive pay' rose from less than 550 in 2006 and 2007 to 832 in 2008 and more than 1000 in all subsequent years (source: Newsbank).

### 2. Shareholder Dissent in the UK

#### 2.1. The Dataset

The dataset used in this study was supplied by Manifest Information Services Ltd and comprises all companies that entered the FTSE 350 Index with any financial year end between 31st December 1998 and 31st March 2012.<sup>10</sup> The dataset records the service dates of each director and full remuneration details.<sup>11</sup> Importantly for this study, it also includes details of votes cast at company annual general meetings (AGMs). Additional data items were obtained from Thomson Datastream. Full descriptions are contained in the Appendix.

Total remuneration was defined as salary and cash bonus, if any, plus the value of options and equity incentives granted in financial year t. Executive stock options (ESOs) have frequently been valued as European call options using some version of the Black and Scholes (1973) model, for example in Conyon et al. (2011). There are two potential difficulties with this in the present context: First, as Murphy (1999) showed, the ESOs breach many of the Black-Scholes assumptions. Perhaps the most important violation occurs through executives holding undiversified financial and human capital in their own firms. This drives a wedge between the option cost to the firm and the option value to its recipient, with the latter number depending on the individual's (subjective) coefficient of risk aversion. Second, since the implementation of the Greenbury report in the UK in the late 1990s, simple ESOs have been largely replaced by long-term incentive plans (LTIPs). These typically provide stock grants subject to performance criteria, very often involving benchmarking against industry competitors.

<sup>&</sup>lt;sup>10</sup>To avoid survivorship bias, companies that drop out of the index prior to 2008 are included in our coverage until the company is wound up or taken private. Investment trusts that contained no executive directors were excluded from the sample, although self-managed investment trusts were retained.

<sup>&</sup>lt;sup>11</sup>Although the database does include some data on pensions, it it poor for the early years, making it unsuitable for use in this study.

They also display considerable idiosyncracies with respect to vesting conditions, making the application of standardised valuation criteria potentially inappropriate. Given the absence of readily available Black-Scholes values for UK options, we have followed the arguments of Gregory-Smith (2012) and used the simplification of valuing all equity incentives granted in year t at one third of their corresponding equity value at the grant date.<sup>12</sup>

# 2.2. The UK Institutional Setting

Companies are required by UK listing rules to hold an AGM at least once every 15 months (Companies Act, 1985), but companies rarely deviate from the best practice of holding an AGM every 12 months. At the AGM, shareholders are asked to approve resolutions proposed by the board. Until 2003, votes on the the remuneration report were on a voluntary basis only. From 2004, the Directors' Remuneration Report Regulations (Department of Trade and Industry, 2002) required companies incorporated under UK company law to hold a vote on the report of the directors' remuneration committee, although this vote remained non-binding. Details on voting are presented in Figure 1 and Table 1.

It is clear from the Figure 1, the average level of dissent on the remuneration committee report<sup>13</sup> remained low over the entire period, although there is an apparent increase in dissent from 2001-3 and again from 2007. Both of these upswings follow periods of extreme stock market turbulence i.e the bursting of the *dot.com* bubble in 2001 and the onset of the global financial crisis in 2007-8. Although attributing the post 2001

 $<sup>^{12}</sup>$ Gregory-Smith (2012) provides robustness checks which suggest that the one third face value simplification offers both a reasonable approximation to adjusted Black-Scholes values, where full information is available, and account for 97% of within-sample variation in Black-Scholes values among 70 sample companies.

<sup>&</sup>lt;sup>13</sup>Votes cast as 'Abstain' are included in this measure, as an abstention is widely understood as an expression of dissent.



Fig. 1: Dissent against remuneration committee report 1998-2012

 Table 1: Remuneration Report Resolutions

Financial	Remuneration	% of Reports	% of Reports	% of Reports	No. of Reports	Average
Year	Report	voted Down	less than $75\%$	less than $90\%$	less than $95\%$	Turnout
Ending	Resolutions		approval	approval	approval	
1998	9	0	0	11.1	33.3	33.5
1999	11	0	0	36.4	63.6	52.4
2000	17	0	5.9	17.6	41.2	46.2
2001	90	0	2.2	34.4	56.7	57.6
2002	285	0.4	11.9	45.6	66.7	57.1
2003	454	0.7	13	42.1	61.2	58.2
2004	443	0.7	7.4	25.1	47.6	60.4
2005	447	0.2	4.9	15.4	35.1	62.2
2006	457	0	4.4	17.9	37.6	63.8
2007	451	0.4	6	18.6	35.7	62.1
2008	454	0.9	9.5	24	37.2	66
2009	443	0.7	11.3	27.8	43.8	67.1
2010	450	0.7	11.3	29.6	46.4	69.8
2011	423	1.2	13.5	34.3	54.8	71.8
$2012^{*}$	33	0	12.1	30.3	54.5	70.8

#### Notes:

1. Proposals of the remuneration report became mandatory for UK incorporated and London Stock Exchange listed companies with the financial year ending on or after 31 December 2002.

2. \* 2012 figures are up to and including 31st March 2012.

upswing in dissent to financial turbulence is potentially muddled by the introduction of mandatory proposals on compensation in 2002, the increase post 2007 does not suffer from such conflating factors. It is this upswing and the impact that it has on subsequent remuneration which is the primary interest of this paper.

Table 1 shows that there has been a steady increase in shareholder representation at AGMs over the period, with representation more than doubling from 1998 to 2012. It might be thought that, post 2007, high levels of dissent and high levels of turnout reflect two facets of increased shareholder activism. However, this does not appear to be the case. The increase in turnout appears to be a general trend, and there is no discernible correlation between high turnout and high dissent (See the left hand side panel of Figure 2).

It is also interesting to note at this juncture that the increased activism post 2007 has not actually raised dissent to unprecedented levels, but simply returned it to the levels that prevailed in 2002-3. Even at these peaks, dissent is still low in absolute terms. It is also important to realise that, even in the years of high average dissent, the incidence of reports actually voted down remains extremely rare.<sup>14</sup>

Very high rates of dissent on the remuneration committee report appear to coincide with a more widely felt unhappiness amongst shareholders, with Figure 2 showing the resulting positive correlation between dissent on pay and dissent more widely defined.<sup>15</sup> Indeed, closer inspection of the defeated remuneration reports (Table 2) indicates that such defeats appear to reflect dissatisfaction at major breaches of best practice by management.<sup>16</sup> This would suggest that when examining the consequences for CEO

 $<sup>^{14}\</sup>mathrm{From}$  1998 to 2012 only 22 of 4467 reports are voted down.

<sup>&</sup>lt;sup>15</sup>The estimated bivariate regression coefficient is 1.0998 with a standard error of 0.0462.

<sup>&</sup>lt;sup>16</sup>For example, in the case of GlaxoSmithKline the major concern lay with the 'parachute clauses' which would have provided generous compensation for the CEO should the company be taken-over (Thompson, 2005). Particularly interesting is the case of United Business Media, in which the retired CEO (Lord Hollick) returned his bonus to the company after anger had been expressed by shareholders. This is very similar to the case cited by Bebchuk and Fried (2004), in which the former CEO of General



Fig. 2: Pay dissent, non-pay dissent and voter turnout

outcomes, considering levels of remuneration disapproval lower than 50% would be appropriate, since then more variation over time is apparent (Table 1).

We next explore how voting dissent is correlated with other firm specific factors. The data is ordered such that voting results are associated with the most recently completed financial year i.e. votes cast for a meeting in May 2007 are typically associated with financial years running 1 January 2006 - 31 December 2006 and so t would equal 2006 in this case. It is apparent from Table 3 column(1) that, as might be expected, voting dissent is lower when shareholder returns in the previous financial year were high.

Interestingly, firm specific governance factors appear to have limited impact on dissent. The percentage of directors on the board judged to be 'insiders', which might be anticipated to cause concern amongst shareholders, does not appear to correlated with higher dissent. The number of executive and non-executive directors and the size of the

Electric (Jack Welch) also gave up some of his post-retirement benefits in response to shareholder outrage.

Company	Year End	% Dissent <sup>1</sup>	Principal Issue	Consequence
GlaxoSmithKline	31 Dec 2002	63.15%	CEO's parachute clause <sup>2</sup>	Remuneration Committee replaced CEO termination provisions reduced
Aegis Group	31 Dec 2003	52.38%	$24 \text{ month service contracts}^2$	CEO resigned, contracts reduced
Baltimore	31 Dec 2003	60.83%	A major shareholder was contesting control of the company	n/a
Eurotunnel	31 Dec 2003	67.04%	A major shareholder was contesting control of the company	n/a
Lonmin	30 Sep 2004	56.08%	$\pounds 500,000 \ ex-gratia$ bonus to a retiring non-executive	None
MFI Furniture Group	25 Dec 2004	60.46%	18 months liquidated damages parachute $clause^2$	Provisions removed
United Business Media	$31 {\rm \ Dec\ } 2004$	87.22%	$\pounds 250,000$ retirement bonus	CEO voluntarily handed back bonus
Croda International	31 Dec 2005	55.09%	Weak LTIP targets <sup>3</sup>	More stretching targets adopted.
Bellway	31 Jul 2008	61.58%	Bonuses paid despite not hitting targets	Future arrangements more objective albeit some discretion remains
RBS	31 Dec 2008	91.50%	Large pension for outgoing CEO alongside a $\pounds 40$ bn loss	Pension arrangements negotiated down in exchange for a lump sum payment
Shell	31 Dec 2008	60.10%	Bonuses paid despite not hitting targets	Bonus clawback introduced
Provident Financial	31 Dec 2008	53.47%	CEO Pay increase & weak bonus conditions	Bonus clawback introduced
Centamin	30 June 2009	52.51%	Inadequate remuneration disclosure	None
Grainger	30 Sep 2009	54.20%	$\pounds 3M$ Termination payment	None
SIG	31 Dec 2009	69.68%	Salary increase amid poor performance	Salary freeze in subsequent year
EasyJet	30 Sep 2010	54.96%	A major shareholder was contesting control of the company	n/a
Afren	31 Dec 2010	59.81%	Inadequate remuneration disclosure	Amendments made but still attracts high dissent
Centamin	31 Dec 2011	64.15%	Bonuses paid despite not hitting targets	Discretion clause removed
WPP	31 Dec 2011	59.63%	Quantum of CEO pay	None
AVIVA	31 Dec 2011	58.57%	Poor performance	CEO resigns
Pendragon	31 Dec 2011	67.78%	Increased bonus caps	Caps reduced to prior levels
Cairn Energy	31 Dec 2011	70.05%	Chairman's Incentive pay	None

 Table 2: Voted Down Remuneration Reports 2002-2012

1. % dissent includes both against votes and abstentions as a percentage of the total. In the cases above, the percentage against exceeded the percentage for.

2. The Combined Code recommends that the CEO's contract should provide for no more than 12 months' salary.

3. Although "against" votes exceeded "for" votes, the resolution was passed on a show of hands at the company meeting. As such, Croda managed to avoid coverage in the business press.

	(1)	D1. 2002	D1. 0000	(=)
		Break 2008	Break 2009	Break 2010
ln(total remuneration)	0 019***	0.019***	0 019***	0 019***
	(0.010)	(0.004)	(0.004)	(0.010)
Total shareholder return (TSR)	-0.014**	-0.013	-0.011	-0.009
	(0,006)	(0,009)	(0.007)	(0.007)
ln(sales)	-0.002	-0.001	-0.000	-0.002
m(ouroo)	(0.002)	(0.002)	(0.002)	(0.002)
% insiders	-0.014	0.006	-0.006	-0.005
/ 0	(0.019)	(0.022)	(0.022)	(0.021)
no. non-exec directors	-0.002	-0.004**	-0.003*	-0.002
	(0.002)	(0.002)	(0.002)	(0.002)
no. exec directors	0.000	0.002	0.001	0.000
	(0.002)	(0.002)	(0.002)	(0.002)
ln(total remuneration)*post break interaction		0.001	0.001	-0.000
		(0.007)	(0.007)	(0.008)
TSR <sup>*</sup> post break interaction		-0.003	-0.006	-0.021
		(0.013)	(0.014)	(0.017)
$\ln(\text{sales})^*$ post break interaction		-0.003	-0.007*	-0.003
		(0.004)	(0.004)	(0.004)
% insiders*post break interaction		-0.051	-0.021	-0.035
		(0.039)	(0.043)	(0.045)
no. non-exec directors*post break interaction		0.004	0.004	0.001
		(0.003)	(0.003)	(0.003)
no. exec directors*post break interaction		-0.004	-0.003	-0.001
		(0.003)	(0.003)	(0.003)
Constant	$-0.129^{***}$	$-0.159^{***}$	$-0.168^{***}$	-0.148***
	(0.047)	(0.053)	(0.052)	(0.051)
Observations	4 090	4 090	4 090	4 090
B-squared	0.044	0.048	0.047	0.046
It byuurou	0.044	0.010	0.011	0.040

Table 3: Voting dissent, pay and performance(1)(2)(3)(4)

1. The dependent variable, dissent, is the total number of against and abstain votes divided by the number of votes The dependent variable, dissent, is the total number of against and abstain votes divided by the number of v cast at the meeting.
 Robust Standard errors in parentheses
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1</li>
 Total remuneration comprises salary, perks, bonuses and a grant date value of options and equity incentives.
 Total remuneration is annualized if the CEO did not serve 12 months in the reporting period

6. Year dummies included

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Quantile					Quantile		
	10	25	50	75	00	10	25	Break 2008	75	00
In(total remuneration)	0.008***	0.010***	0.016***	0.023***	0.030***	0.008***	0.000***	0.015***	0.023***	0.033**
m(total remuneration)	(0.000)	(0.010)	(0.010)	(0.025)	(0.000)	(0.000)	(0.003)	(0.003)	(0.025)	(0.035)
Total shareholder return (TSB)	0.001	0.001	-0.008**	-0.020**	-0.052***	0.002	0.001	-0.010**	-0.020**	-0.050**
iotal shareholder return (151t)	(0.001)	(0.001)	(0.000)	(0.020)	(0.016)	(0.002)	(0.001)	(0.005)	(0.012)	(0.025)
ln(sales)	0.001***	0.001	0.000	-0.005**	-0.010**	0.001***	0.001**	0.001	-0.003	-0.011
m(bulles)	(0.000)	(0.001)	(0.001)	(0.002)	(0.005)	(0.000)	(0.001)	(0.001)	(0.003)	(0.007)
no. non-exec directors	-0.000	-0.000	-0.001	-0.004**	-0.007*	0.000	-0.000	-0.002	-0.005*	-0.011**
	(0.000)	(0.000)	(0.001)	(0.002)	(0.004)	(0.000)	(0.000)	(0.001)	(0.003)	(0.005)
no. exec directors	0.001***	0.001*	0.001	0.002	0.005	0.001**	0.001***	0.002	0.003	0.007
	(0.000)	(0.000)	(0.001)	(0.002)	(0.004)	(0.000)	(0.001)	(0.001)	(0.003)	(0.005)
% insiders	0.004	0.003	0.000	-0.040	-0.062	0.004	0.007	0.013	-0.008	-0.025
	(0.003)	(0.005)	(0.011)	(0.025)	(0.050)	(0.004)	(0.007)	(0.014)	(0.034)	(0.070)
ln(total remuneration)*post break interaction						0.000	0.004**	0.007*	-0.002	-0.013
						(0.001)	(0.002)	(0.004)	(0.010)	(0.020)
TSR*post break interaction						-0.001	-0.002	0.003	0.003	0.015
						(0.002)	(0.003)	(0.007)	(0.017)	(0.035)
$\ln(\text{sales})^*$ post break interaction						-0.000	-0.002*	-0.004*	-0.006	-0.004
						(0.001)	(0.001)	(0.002)	(0.005)	(0.011)
no. non-exec directors*post break interaction						-0.001**	0.000	0.002	0.005	0.013
						(0.000)	(0.001)	(0.002)	(0.004)	(0.008)
no. exec directors*post break interaction						0.000	-0.001	-0.003*	-0.010**	-0.008
						(0.000)	(0.001)	(0.002)	(0.004)	(0.009)
% insiders*post break interaction						0.001	-0.010	-0.035	-0.103*	-0.022
	a constant i	a consider t	a carded t			(0.006)	(0.010)	(0.021)	(0.053)	(0.107)
Constant	-0.127***	-0.151***	-0.191***	-0.079	0.054	-0.117***	-0.132***	-0.145***	-0.070	0.085
	(0.007)	(0.012)	(0.025)	(0.058)	(0.116)	(0.009)	(0.015)	(0.032)	(0.079)	(0.161)
Observations	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090	4,090

 Table 4: Voting dissent, pay and performance

1. The dependent variable, dissent, is the total number of against and abstain votes divided by the number of votes cast at the meeting.

2. Robust Standard errors in parentheses

3. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

4. Total remuneration comprises salary, perks, bonuses and a grant date value of options and equity incentives.

5. Total remuneration is annualized if the CEO did not serve 12 months in the reporting period

6. Year dummies included

firm (as measured by sales) are also not systematically associated with votes against the remuneration committee report. In short, the results do not indicate that the direct democracy of 'say on pay' is being used to remedy defects in the representative system of boardroom appointments.

Turning to the main variable of interest, Table 3 column (1) shows that voting dissent is higher where levels of remuneration are higher, ceteris paribus. This would indicate that at least some shareholders object to levels of pay that they perceive to be excessive, given the performance of the firm. Note however, that the magnitude of the correlation is small - a 10% increase in salary corresponds to an increase in voting dissent of approximately 0.2 percentage points.

In columns (2)-(4) we investigate the extent to which the correlation between remuneration dissent, remuneration and shareholder returns have changed following the onset of the financial crisis. Various potential break point years are tested. The results would indicate that there has been no structural break in the underlying relationship.<sup>17</sup> Thus observed increases in dissent are associated with changes in the level of correlated variables rather than a change in the correlation between them over time.

In Table 4 we examine how the correlations vary across the quantiles of dissent. This gives a more nuanced picture. Dissent is particularly highly correlated with pay at its higher quantiles, although here the negative correlation of shareholder returns with dissent is also much greater. At low levels of dissent, the size of the firm is positively correlated with votes against, whilst at high levels of dissent the opposite holds. Again we examine whether there is any indication of a change in correlations in the period after 2007 and, in general, there are no strong indications that this is the case, although there is an increase association between remuneration and dissent at the 25th percentile which is significant at the 5% level.

 $<sup>^{17}\</sup>mathrm{p}\text{-values}$  for the relevant F-test are 0.174, 0.346 and 0.609 respectively.

# 2.3. Does dissent moderate pay?

The results discussed so far would suggests that large pay awards are correlated with an increase in votes against the report of the remuneration committee. It is an interesting question as to whether this dissent leads to the moderation of pay awards in the following year. To examine this we estimate an equation in which remuneration<sup>18</sup> is regressed on lagged dissent, plus a vector of control variables that are standard in the CEO remuneration literature- these include the age of the CEO, sales, shareholder return, board composition and variables describing equity ownership. The results are given in Table 5.

In our sample, higher levels of executive remuneration are highly correlated with total shareholder return. This suggests a strong link between pay and performance for chief executives. Among the other control variables, firm size (log sales) produces the expected large positive impact on remuneration, with an elasticity (0.203) lying within the range established in prior literature (Murphy, 1999). Having controlled for size, the number of non-executive directors is positively correlated with remuneration casting some doubt on their efficacy in constraining any executive rent-seeking behaviour.

The level of dissent in the previous year is a statistically significant determinant of remuneration. In Table 5 we allow the impact of dissent to differ above and below the mean level of dissent but fitting a spline with a knot at 10%. Below this level of dissent, remuneration and dissent are positively correlated, above this level of dissent pay has a moderating impact on pay. To investigate this issue further, we present quantile regression estimates in columns (3) to (7) of Table 5. These results serve to reinforce the basic regression results. At all levels of remuneration, low levels of dissent to on the present of the present of the remuneration of CEOs, and may act as an encouragement to

<sup>&</sup>lt;sup>18</sup>The measure of pay is the expected value of the compensation package in the year it was granted. The model is estimated from 2003 onwards, since prior to this remuneration report voting was on a voluntary basis and so self-selection may be an issue.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	mean	mean	10	25	Quantile 50	75	90	10	25	Quantile 50	75	90
$Dissent_{t-1} \leq 10$	3.559***	2.900***	2.288***	2.360***	3.243***	3.946***	5.600***	1.109	1.775***	3.009***	3.201***	6.089***
	(0.401)	(0.555)	(0.659)	(0.456)	(0.383)	(0.530)	(0.727)	(1.012)	(0.627)	(0.521)	(0.704)	(0.981)
$Dissent_{t-1} > 10$	-0.434**	-0.327	-0.104	-0.266	-0.396**	-0.429*	-0.615**	-0.164	-0.073	-0.343	-0.401	-0.670
	(0.169)	(0.251)	(0.278)	(0.192)	(0.162)	(0.223)	(0.307)	(0.457)	(0.283)	(0.236)	(0.318)	(0.443)
$Dissent_{t-1} \ll 10 * Post 2007$	. ,	$1.371^{*}$	· · · ·	. ,		. ,	. ,	2.031	0.933	0.624	1.382	-0.873
		(0.795)						(1.449)	(0.899)	(0.747)	(1.008)	(1.405)
$Dissent_{t-1} > 10 * Post 2007$		-0.229						-0.014	-0.223	-0.263	0.002	0.101
		(0.340)						(0.619)	(0.384)	(0.319)	(0.431)	(0.601)
Age	$0.172^{***}$	$0.170^{***}$	$0.164^{***}$	$0.091^{***}$	$0.063^{***}$	$0.047^{*}$	$0.095^{**}$	$0.171^{***}$	$0.094^{***}$	$0.066^{***}$	$0.049^{*}$	$0.088^{**}$
	(0.020)	(0.020)	(0.034)	(0.023)	(0.020)	(0.027)	(0.037)	(0.037)	(0.023)	(0.019)	(0.026)	(0.036)
Age squared	-0.002***	-0.002***	-0.002***	-0.001***	-0.001***	-0.000	-0.001**	-0.002***	$-0.001^{***}$	$-0.001^{***}$	-0.000*	-0.001**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$\ln(\text{sales})$	$0.203^{***}$	$0.203^{***}$	$0.257^{***}$	$0.232^{***}$	$0.212^{***}$	$0.185^{***}$	$0.162^{***}$	$0.254^{***}$	$0.233^{***}$	$0.214^{***}$	$0.188^{***}$	$0.160^{***}$
	(0.009)	(0.009)	(0.015)	(0.010)	(0.008)	(0.012)	(0.016)	(0.016)	(0.010)	(0.008)	(0.011)	(0.016)
TSR	$0.224^{***}$	$0.223^{***}$	$0.212^{***}$	$0.230^{***}$	$0.230^{***}$	$0.238^{***}$	$0.222^{***}$	$0.234^{***}$	$0.225^{***}$	$0.223^{***}$	$0.233^{***}$	$0.210^{***}$
	(0.034)	(0.034)	(0.056)	(0.039)	(0.033)	(0.045)	(0.062)	(0.062)	(0.039)	(0.032)	(0.043)	(0.061)
no. non-executive directors	$0.112^{***}$	$0.111^{***}$	$0.087^{***}$	$0.101^{***}$	$0.108^{***}$	$0.124^{***}$	$0.125^{***}$	$0.085^{***}$	$0.099^{***}$	$0.106^{***}$	$0.122^{***}$	$0.124^{***}$
	(0.007)	(0.007)	(0.011)	(0.008)	(0.006)	(0.009)	(0.012)	(0.012)	(0.008)	(0.006)	(0.009)	(0.012)
no. executive directors	0.006	0.006	-0.013	-0.017*	-0.011	0.017	0.018	-0.017	-0.014	-0.010	0.019*	0.018
~	(0.008)	(0.008)	(0.013)	(0.009)	(0.008)	(0.011)	(0.015)	(0.015)	(0.009)	(0.008)	(0.010)	(0.014)
% insiders	0.094	0.092	0.260	0.439***	0.288***	0.115	-0.261	0.294*	0.457***	0.265***	0.070	-0.301*
	(0.096)	(0.097)	(0.158)	(0.110)	(0.092)	(0.127)	(0.175)	(0.176)	(0.109)	(0.091)	(0.122)	(0.171)
Constant	4.135***	4.177***	2.887**	4.875***	6.473***	7.303***	6.888***	2.750**	4.758***	6.376***	7.252***	7.143***
	(0.836)	(0.836)	(1.159)	(0.802)	(0.674)	(0.932)	(1.280)	(1.290)	(0.800)	(0.665)	(0.897)	(1.251)
Observations	2,964	2,964	2,964	2,964	2,964	2,964	2,964	2,964	2,964	2,964	2,964	2,964
R-squared	0.486	0.486										

Table 5: Quantile regression estimates of the impact of dissent on remuneration

1. The dependent variable is total remuneration, which comprises salary, perks, bonuses and a grant date value of options and equity incentives.

2. % Dissent is the total number of against and abstain votes divided by the number of votes cast at the meeting.

3. Standard errors in parentheses 4. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

increase it. However levels of dissent higher than the mean act as a very real restraint. These findings are magnified as we move across the pay quantiles. At the 90th centile, a 10% point increase in registered dissent levels above the mean reduces pay by 6.2%. We interpret these results as indicating that dissent will only be factored into pay determination once a threshold level of dissent has been expressed.<sup>19</sup> This is consistent with at least a weak form of the 'outrage' constraint proposed by Bebchuk and Fried (2003, 2004).

In Table 5 we also investigate whether the moderating impact of dissent on trade has changed following the onset of the financial crisis. Column (2) shows no indication that the impact of dissent has changed at the mean of remuneration. Columns (8)-(12) perform a similar exercise at different quantiles of pay. Again there is no indication that the restraining impact of dissent on pay has increased in the post 2007 period.

# 3. Conclusion

The current policy debate over shareholders votes on executive remuneration has seen provisions enacted in an increasing number of countries. Common to all such policies is the belief that aggrieved shareholders should be able to block excessive remuneration arrangements, either via generating embarrassment for the executive or, increasingly, via binding resolution. Such arguments appear justifiable in the light of a number of well publicized cases of apparent abuse. This paper seeks to provide evidence on the role that shareholder votes currently plays in constraining compensation. The results presented in this paper indicate that voting does constrain pay, at least when it exceeds a threshold of dissent. This effect is increasingly felt across the pay deciles, though the magnitude of this impact is relatively small. Since our data covers the population of

<sup>&</sup>lt;sup>19</sup>This accords with our own conversations with industry practitioners (Manifest, Hay Group, Deloitte, Towers Watson, Risk Metrics).

UK firms in the top 350 over the period since the introduction of mandatory voting, these results must be taken an indicating an important, if limited, role for 'say on pay'. However we do not find a strengthening of this impact in the aftermath of the financial crisis.

Of course, there may also be other indirect benefits to such a policy. The requirement of a vote does more that put the remuneration report under public scrutiny. It encourages corporate governance advisers and financial institutions to take a view on appropriate levels of compensation. Furthermore, some more recent say on pay schemes, including the Dodd-Frank Act in the USA, which require the publication of financial institution voting data, may lead to a greater involvement yet of institutional shareholders. This is certainly envisaged under the FRC (2010b) *Stewardship Code* for the UK. It may also be that fear of provoking dissent constrains the remuneration committee, and/or the remuneration consultants on whose work the committee draws, to design packages within acceptable bounds. Indeed, a cynical view of the role of the remuneration consultant could be that it is to assess the acceptable level of uplift.

It is also true that the subsequent disciplinary aspect of the voting mechanism may work in ways not pursued in this paper, for example via an increased likelihood of the CEO leaving the company. Anecdotal evidence suggests that this may be the case with some senior executives, who have been on the receiving end of shareholder protests, being 'ousted' from the board.<sup>20</sup> Our data suggests that approximately one-third of executive directors resign on the day of the AGM. Identifying which of these resignations are the result of normal turnover, and which are the result of shareholder dissent, is beyond the scope of this paper. One strategy would be to adopt a survival model within a competing risks framework, thus allowing for different modes of exit. This remains for future work.

<sup>&</sup>lt;sup>20</sup>One such case is noted in Table 2 where AVIVA CEO Andrew Moss resigned following the AGM.

Ian Gregory-Smith, University of SheffieldSteve Thompson, University of NottinghamPeter W. Wright, University of Sheffield

 Table A.1: Variable Descriptions

	Table A.1. Variable Descriptions
Variable	Comment
Dissent	The number of votes "against" or "abstain" as a percentage of total votes
	cast.
Pay Variables	Total remuneration comprises salary, perks, bonuses, options and equity in-
	centives, expressed in December 2008 prices. The price of these options and
	equity incentives are for the day they are granted and taken from the compa-
	nies' annual report and accounts. Figures are pro-rata if served a period other
	than 12 months, subject to serving at least 3 months of the financial year.
	Total remuneration uses a grant date value of options and equity incentives
	(one-third of their face value), rather than their final exercised values.
Sales	The log of Sales measured in £000s, annualized and in December 2008 prices.
Insiders	The number of executives directors and non-independent non-executive di-
	rectors as a percentage of the total number of directors on the board.
No. executive directors	The number of executive directors at the financial year end including the
	CEO.
No. non-executive directors	The number of non-executive directors at the financial year end excluding the
	Chairman.
Age	The Age of the CEO at the financial year end.
Total Shareholder Return (TSR)	The difference in the log of the return index from Thomson Datastream. The
	return index captures both the movement in share price and income from
	dividends.

# References

- Armstrong, C.S., Gow, I.D. and Larcker, D.F. (2013). 'The efficacy of shareholder voting: Evidence from equity compensation plans', *Journal of Accounting Research*, vol. Forthcoming.
- Bebchuk, L.A. and Fried, J. (2003). 'Executive compensation as an agency problem', Journal of Economic Perspectives, vol. 17(3), pp. 71–92.
- Bebchuk, L.A. and Fried, J. (2004). Pay without Performance: The Unfulfilled Promise of Executive Compensation, Harvard University Press.
- Bebchuk, L.A. and Spamann, H. (2010). 'Regulating bankers' pay', Georgetown Law Review, vol. 98, pp. 247–287.
- Bell, B. and Van Reenen, J. (2010). 'Bankers' pay and extreme wage inequality in the UK', Centre for Economic Performance, LSE, Working Paper CEPSP 21.
- Berle, A.A. and Means, G.C. (1932). *The modern corporation and private property*, Harcourt Brace, New York.
- Black, F. and Scholes, M.S. (1973). 'The pricing of options and corporate liabilities', Journal of Political Economy, vol. 81(3), pp. 637–54.
- Carter, M.E. and Zamora, V. (2009). 'Shareholder Remuneration Votes and CEO Compensation Design', Boston University Working Paper Series.
- Chakrabarti, R., Subramanian, K., Yadav, P.K. and Yadav, Y. (2012). 'Executive compensation and pay for performance in China', in (R. S. Thomas and J. G. Hill, eds.), *Research Handbook on Executive Pay*, pp. 414–434, Edward Elgar.
- Conyon, M. and Ho, L. (2012). 'Executive compensation and pay for performance in

China', in (R. S. Thomas and J. G. Hill, eds.), *Research Handbook on Executive Pay*, pp. 414–434, Edward Elgar.

- Conyon, M. and Sadler, G. (2010). 'Shareholder voting and directors' remuneration report legislation: Say on pay in the United Kingdom', *Corporate Governance: an International Review*, vol. 18, pp. 296–312.
- Conyon, M.J., Core, J.E. and Guay, W.R. (2011). 'Are U.S. CEOs paid more than U.K. CEOs? inferences from risk-adjusted pay', *Review of Financial Studies*, vol. 24(2), pp. 402–438.
- Core, J.E., Guay, W. and Larcker, D.F. (2008). 'The power of the pen and executive compensation', *Journal of Financial Economics*, vol. 88(1), pp. 1–25.
- Davis, S. (2008). 'Does say on pay work? Lessons on making CEO compensation accountable', Millstein Center for Corporate Governance and Performance, Yale School of Management.
- Department of Trade and Industry (2002). Statutory Instrument 2002 No. 1986: Directors' Remuneration Report Regulations.
- Dyck, A. and Zingales, L. (2002). 'The corporate governance role of the media', National Bureau of Economic Research, Working Paper Series, 9309.
- Fahlenbrach, R. and Stulz, R.M. (2011). 'Bank CEO incentives and the credit crisis', Journal of Financial Economics, vol. 99(1), pp. 11–26.
- Ferri, F. and Maber, D.A. (2012). 'Say on Pay Votes and CEO Compensation: Evidence from the UK', *Review of Finance, forthcoming*.

FRC (2010a). Implementation of the UK Stewardship code, Financial Reporting Council.

FRC (2010b). The UK Stewardship code, Financial Reporting Council.

- Gregory-Smith, I. (2012). 'Chief executive pay and remuneration committee independence', Oxford Bulletin of Economics and Statistics, vol. 74(4), pp. 510–531.
- Hill, J. (2012). 'Regulating executive remuneration after the global financial crisis: Common law perspectives', in (R. S. Thomas and J. G. Hill, eds.), *Research Handbook on Executive Pay*, pp. 219–240, Edward Elgar.
- Holmström, B.R. (2005). 'Pay without performance and the managerial power hypothesis: A comment', *Journal of Corporation Law*, pp. 703–713.
- Jensen, M. and Murphy, K. (1990). 'Performance pay and top-management incentives', Journal of Political Economy, vol. 98(2), pp. 225–263.
- Jensen, M.C. (1979). 'Toward a theory of the press', in (K. Brunner, ed.), *Economics and Social Institutions*, pp. 251–74, Martinus Nijhoff.
- Jensen, M.C. and Meckling, W.H. (1992). 'Specific and general knowledge and organizational structure', in (L. Werin and H. Wijkander, eds.), *Contract Economics*, pp. 251–74, Oxford.
- Murphy, K. (1999). 'Executive compensation', in (O. Ashenfelter and D. Card, eds.), Handbook of Labor Economics, pp. 2485–2563, vol. 3, North Holland.
- Murphy, K.J. (2012). 'The politics of pay: A legislative history of executive compensation', in (R. S. Thomas and J. G. Hill, eds.), *Research Handbook on Executive Pay*, pp. 11–40, Edward Elgar.
- Peters, F.S. and Wagner, A.F. (2011). 'The Executive Turnover Risk Premium', Swiss Finance Institute, paper 08-11.
- Sheehan, K.M. (2007a). 'A Model of the Outrage Constraint', SSRN eLibrary.

- Sheehan, K.M. (2007b). 'Is the Outrage Constraint an Effective Constraint on Executive Remuneration? Evidence from the UK and Preliminary Results from Australia', SSRN eLibrary.
- Sheehan, K.M. (2012). 'Say on pay and the outrage constraint', in (R. S. Thomas and J. G. Hill, eds.), *Research Handbook on Executive Pay*, pp. 255–283, Edward Elgar.
- Thomas, R.S. (2012). 'Lessons from the rapid evolution of executive remuneration practices in Australia: Hard law, soft law, boards and consultants', in (R. S. Thomas and J. G. Hill, eds.), *Research Handbook on Executive Pay*, pp. 341–68, Edward Elgar.
- Thompson, S. (2005). 'The impact of corporate governance reforms on the remuneration of executives in the UK', *Corporate Governance*, vol. 13(1), pp. 19–25.
- Walker, S.D. (2009). A review of corporate governance in UK banks and other financial industry entities. Final recommendations, HM Treasury.
- Weisbach, M.S. (2007). 'Optimal executive compensation versus managerial power: A review of Lucian Bebchuk and Jesse Fried's 'Pay without performance: The unfulfilled promise of executive compensation", *Journal of Economic Literature*, vol. 45(2), pp. 419–428.
- Yermack, D. (2010). 'Shareholder voting and corporate governance', Annual Review of Financial Economics, vol. 2(1), pp. 103–125.