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“Say on Pay” Regulations and Director Remuneration:

Evidence from the UK in the Past Two Decades

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Abstract

The UK was the first country to introduce so- called “say on pay” regulation in 2002, by providing shareholders with an advisory vote on the Directors’ Remuneration Report. That approach recognised that disclosure alone was not an adequate regulatory response to the widening gap between directors’ pay and company performance nor to the broader political concern over the implications of this trend for social solidarity. A second stage in the evolution of the regime began in 2013 when shareholders were granted a binding vote on remuneration policy. In this article we present the results of the first longitudinal survey of the entire phase of “say on pay” regulation in the UK to date. We examine the link between each stage of “say on pay” regulation and the level and growth of directors’ remuneration, taking into account the split between different elements of overall remuneration. We draw attention also to the role of incentives and to the criteria and benchmarks associated with them. We conclude by linking our empirical evidence to broader developments in shareholder engagement with listed companies and indicate areas for further research.

Keywords

Corporate Governance, Shareholder Activism, “Say on Pay,” Executive Remuneration, Listed Companies

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A. Introduction

In this paper we study the impact of UK “say on pay” regulations on director remuneration⁴. Building on initiatives to enhance transparency of executive pay in the UK and the US in 1992, the UK was the first country to legislate “say on pay” in 2002. In the UK, the so-called “say on pay” rule was introduced in two stages. First, the annual advisory shareholder vote on the remuneration committee report (the Directors’ Remuneration Report, or “DRR”) has been mandatory since 2003. Second, the Remuneration Report produced by publicly listed companies since 2013 has been subject not only to an advisory shareholder vote, but also a binding vote on remuneration policy, at least every three years. There is a trend of similar initiatives developing worldwide. For instance, the annual advisory vote has been mandated in Australia since July 2005, in Spain since 2008 and in the US from 2010.⁵ On the other hand, a binding vote on remuneration policy has been mandated in the Netherlands since October 2004, in Sweden since July 2006, in Norway since January 2007 and in Spain since 2011. Moreover, as a result of the Shareholder Rights Directive II (“SRD II”),⁶ in all Member States shareholders should have the right to cast their vote, as a binding or advisory decision, on the remuneration policy for members of the board (and a vote should take place at every

⁴ This paper refers to the “remuneration” of UK executive directors, rather than “compensation” (which is an American term).

⁵ Section 951 of the 2010 Dodd-Frank Act introduced for instance an advisory “say on pay” shareholder vote on executive compensation that should happen at least every three years. The effectiveness of “say on pay” is disputed in the US. Bainbridge, for instance, argues that as the requirement of shareholder approval is non-binding and the managers will be protected by the business judgment rule, this concept is likely to be of minimal effect. See: S Bainbridge, *Corporate Governance after the Financial Crisis* (OUP 2012) 135. Also, in a more recent empirical study Bebchuk and Hirst argue that the Big Three index fund managers (BlackRock, Vanguard and SSGA) very rarely oppose pay proposals (despite the suggestions of ISS, the leading proxy advisor), showing pro-management tendencies. See: L Bebchuk and S Hirst, ‘Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy’ (2019) 62-66 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3282794> accessed 5 December 2019.

⁶ Directive (EU) 2017/828 of the European Parliament and the Council of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement. Member states were required to transpose the majority of SRD II’s requirements (except Articles 3a, 3b and 3c) into national law by 10 June 2019.

material change and in any case at least every four years)⁷ and shareholders should also have an advisory vote on the remuneration report (i.e. implementation of the remuneration policy).⁸ These “say on pay” initiatives in general aim to promote shareholder activism (i.e. any form of shareholder engagement in the running of the company), giving shareholders more power and influence to shape director remuneration.

Most extant research on “say on pay” initiatives focuses on the UK and the US. The growing literature on “say on pay” in the UK tends to examine the impact on shareholder voting outcomes.⁹ For instance, Ferri and Maber¹⁰ provide empirical evidence that investors in UK companies perceive the “say on pay” regulation of 2002 to be a value-enhancing monitoring mechanism and that they are successful in using the votes to pressure firms to remove controversial pay practices and increase the sensitivity of pay to inferior performance. Conyon and Sadler¹¹ find that fewer than 10% of shareholders abstain or vote against the advisory DRR resolution and this percentage falls over time from 2002-2007. In addition, the authors use a sample of public firms in 2006 and show that firms with higher CEO pay attract greater voting dissent, but there is little evidence that CEO pay is lower or that CEO equity pay is greater as a result. Overall, the authors argue that on average this regulation has a limited effect in altering the subsequent level and design of CEO remuneration in the UK.

⁷ Art. 9a SRD II.

⁸ Art. 9b SRD II.

⁹ W Alissa, ‘Boards’ Response to Shareholders’ Dissatisfaction: The Case of Shareholders’ Say on Pay in the UK’ (2009) <<http://ssrn.com/abstract=1412880>> accessed 1 May 2019; M Carter, and V Zamora, ‘Shareholder Remuneration Votes and CEO Compensation Design’ (2009) Boston University Working Paper; M Conyon and G Sadler, ‘Shareholder Voting and Directors’ Remuneration Report Legislation: Say on Pay in the UK’ (2010) 18(4) Corporate Governance: An International Review 296; F Ferri and D Maber, ‘Say on Pay Votes and CEO Compensation: Evidence from the UK’ (2013) 17(2) Review of Finance 527; C Gerner-Beuerle, and T Kirchmaier, ‘Say on Pay: Do Shareholders Care?’ (2016) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2720481> accessed 1 May 2019.

¹⁰ Ferri and Maber *ibid*.

¹¹ Conyon and Sadler (n 9).

In the same spirit we review the introduction of a mandatory “say on pay” vote for shareholders in UK listed companies and provide empirical evidence with regard to its effectiveness in constraining pay and shaping the structure of remuneration. Our data, taken from a large sample of UK firms between 1999 and 2018, extends over the entire cycle of “say on pay” regulation in the UK since its introduction in 2003. That is, the Directors’ Remuneration Report Regulations of 2002 and the Enterprise and Regulatory Reform Act 2013 which introduced a mandatory shareholder (advisory) vote on the remuneration report and a binding vote on remuneration policy, respectively. We hypothesise that, in principle, further enhanced shareholder voice, as formalised in a binding “say on pay” vote as opposed to an advisory one, would give rise to serious reputation concerns and prompt boards to negotiate excess pay and communicate with shareholders better, resulting in fewer inefficient remuneration contracts. However, the design of such an expanded form of shareholder intervention would represent a considerable legal challenge and is not an issue that we address directly in this paper¹².

More broadly, we wish to know how the reallocation of rights as well as improved information disclosure in the decision-making process might impact the dynamics of boards and the complex corporate governance system in general. From a public policy perspective, these issues are significant in determining whether the internal dynamics of the corporate system can operate effectively to constrain excessive pay or whether, as some would argue, more direct regulatory intervention by governments over pay levels is required to resolve the issue. Our research focus differs from prior research in the field in two key aspects. First, we focus on the entire period during which “say on pay” regulations have been in effect in the

¹² Among the issues that would have to be considered are: the logic of expanding shareholder intervention rights on an ad hoc as opposed to a more systematic basis; the impact of shareholder intervention on contracts in force; and the role of the Board Remuneration Committee and Independent Directors under the UK Corporate Governance Code.

UK. This allows us to estimate and compare the effects of the two different sets of regulations, which can be expected to differ. Second, our focus is on the impact of “say on pay” on remuneration rather than the interpretation of the voting patterns of shareholders in the “say on pay” process.

Our study further contributes to the literature on shareholder activism. Specifically, we add to this literature by extending early studies such as Ferri and Maber¹³ and Conyon and Sadler¹⁴ – we review the history of UK “say on pay” initiatives in the past two decades and study the impact of two major “say on pay” regulations that have empowered shareholders in terms of setting director remuneration.¹⁵ We first find that the growth in pay that continues after the introduction of the advisory vote is more driven by equity-based remuneration. We then observe a constraint on pay in general since the introduction of the binding vote, which is more linked with a reduction in equity-based remuneration. Therefore, this finding might suggest that shareholders are now more inclined to focus on rewards for past and near-term performance. In addition, we conduct a sensitivity analysis and find that the pay constraint observed since the binding “say on pay” vote is more pronounced in firms that are associated with inferior corporate governance, based on two measures: larger board size and excess pay. In contrast, we don’t find a similar pay constraint in firms listed in the alternative markets. These findings suggest that firms which can potentially gain more from a strengthened shareholder voice are the prime beneficiaries of the binding “say on pay” vote.

Overall, our research provides evidence that “say on pay,” at least in its most recent form, has moved the balance of power more towards shareholders. Although remuneration proposals are still rarely rejected, the influence of shareholders on the remuneration policy of

¹³ Ferri and Maber (n 9).

¹⁴ Conyon and Sadler (n 9).

¹⁵ The classification of different types of shareholders is outside the scope of this article.

a publicly-listed company is becoming considerable: empowering shareholders with a binding vote appears to have a material effect on curbing excess director remuneration, potentially by stimulating shareholders' engagement and by increasing pressure on boards regarding remuneration matters.

The remainder of this paper proceeds as follows: Section B sets out the corporate governance context on the relationship between excessive remuneration and shareholder voice, and reviews the evolution of the legal framework in the UK linked to "say on pay"; Section C explains the scope of this paper and presents our research hypotheses; Section D describes the data collection, sample formation and variable construction; Section E presents our empirical results; Section F discusses the findings; Section G considers shareholder engagement and its links with executive pay and Section H concludes.

B. Governance and Regulatory Context in the UK

1. Excessive Remuneration, Agency Problems and Shareholder Voice

The issue of excessive executive pay can be traced back to the early 20th century.¹⁶ Not surprisingly, its role in the latest financial crisis has become a focal point of media debate and public attention. It is commonly believed that the skewed financial incentives embedded in (excessive) executive pay led to many short-term and risky bets that jeopardised financial stability and contributed to the financial crisis.¹⁷ And a broader concern has been that excessive remuneration creates a degree of inequality that damages employee relations and

¹⁶ See J Cai and R Walkling, 'Shareholders' Say on Pay: Does It Create Value?' (2011) 46(2) *Journal of Financial and Quantitative Analysis* 299 for some examples of historical news articles with similar headlines.

¹⁷ A Cahn and D Donald, *Comparative Company Law: Text and Cases on the Laws Governing Corporations in Germany, the UK and the USA* (2nd edn, CUP 2018), Ch 15 for an overview of the risks of variable pay.

ultimately corporate performance.¹⁸ For instance, Figure 1 shows means (medians) of total remuneration of executive directors in FTSE All-Share companies, rising from £569k (£301k) in 1999 to £1,837k (£1,239k) in 2017, indicating a 12% (17%) annual growth on average over this 18-year time period.

[Insert Figure 1 about here]

It is therefore hardly surprising that there have been calls for governments to take action and promote better corporate governance regarding remuneration practices.

According to the classic principal-agent theory, the remuneration contract of a firm manager is designed by its owner for the purpose of maximising the firm's value. In a firm with dispersed ownership, as in the case of listed companies in the UK, active involvement on the part of shareholders in the negotiation of an efficient contract is problematic because of the free-rider problem. One remedy is for shareholders to delegate this right to the board of directors who would act in the best interests of shareholders. In dispersed share ownership jurisdictions, law and economics scholars tend to view executive remuneration as a manifestation of the agency problem.¹⁹ To address this problem, greater shareholder involvement in the process of setting pay might be one remedy.²⁰ The aim of director remuneration is to align the interests of managers with shareholders, and so both the appropriate structure and scale of remuneration are taken to be evidence that the principal-

¹⁸ BEIS, *Executive Rewards: Paying for Success, Eighteen Report of Session 2017-19* (2019) <<https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/2018/2018.pdf>> accessed 1 May 1 2019.

¹⁹ Bainbridge (n 5) chapter 4; L Bebchuk, J Fried, 'Executive Compensation as an Agency Problem' (2003) 17(3) *Journal of Economic Perspectives* 71.

²⁰ S Stathopoulos and G Voulgaris, 'The Importance of Shareholder Activism: The Case of Say-on-Pay' (2016) 24 *Corporate Governance: An International Review* 359.

agent problem is being addressed.²¹ Even so, framing a process for reaching that outcome remains challenging. Some proponents argue that, without stronger rights for shareholders, enhancing disclosure is not a sufficient condition, but merely a necessary one.²² Enhanced shareholder voice following “say on pay” votes and reputation concerns would help boards negotiate CEO remuneration contracts that are better aligned with shareholders needs and expectations. In contrast, opponents argue that such votes, if unbinding, would be neglected at best, and might cause directors to pander to ill-informed shareholders, leading to suboptimal pay practices.²³ Moreover, managers have strong incentives to use their powers to influence executive remuneration.²⁴ Structuring the board so that independent directors control the remuneration process provides some protection against the board being captured by the interests of executive directors or senior managers, but even so, the literature suggests that this approach has not effectively constrained the growth in remuneration.²⁵ And there may also be broader risks associated with such an approach, with commentators arguing that shareholder pressure drove the expansion in bank risk-taking ahead of the 2008 global financial crisis and others pointing to the potential marginalisation of non-financial stakeholder interests in board decision-making.²⁶

²¹ Bainbridge (n 5) 114.

²² L. Bebchuk, ‘Testimony before House Financial Services Committee on Shareholder Advisory Votes on Compensation’ (2007) <http://www.law.harvard.edu/faculty/bebchuk/pdfs/2007_HFSC.pdf> 22 February 2019.

²³ S Bainbridge, ‘Remarks on Say on Pay: An Unjustified Incursion on Director Authority’, UCLA School of Law, Law-Econ Research Paper No. 08-06 (2008) <<https://ssrn.com/abstract=1101688>> accessed 22 February 2019.

²⁴ Bainbridge (n 5) 115; Bebchuk, Fried (n 19).

²⁵ L. Bebchuk, and J. Fried, *Pay Without Performance: The Unfulfilled Promise of Executive Remuneration* (Harvard University Press, 2004); J. Core and W. Guay, ‘Is Pay Too High and Are Incentives Too Low? A Wealth-based Contracting Framework’ (2010) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1544018> accessed 1 May 2019, for related discussions.

²⁶ See on the first point E. Avgouleas and J. Cullen, ‘Market Discipline and EU Corporate Governance Reform in the Banking Sector: Merits, Fallacies, and Cognitive Boundaries’ (2014) 41 (1) *Journal of Law and Society* 28, 16; and on the second I-M. Esser and I. MacNeil, ‘Disclosure and engagement: stakeholder participation mechanisms’ (2019) 30(2) *European Business Law Review* 201.

The 2018 UK Corporate Governance Code frames the principles for setting remuneration in a modified form of principal-agent theory in the sense that its focus extends beyond maximising the firm's value, which had been the priority in the early years of the code in line with the primary focus on shareholders' interests. It now adopts as its starting point that:

Remuneration policies and practices should be designed to support strategy and promote long-term sustainable success. Executive remuneration should be aligned to company purpose and values, and be linked clearly to the successful delivery of the company's long-term strategy.²⁷

The 2018 CG Code goes on to state that the Remuneration Committee should address the following issues: clarity; simplicity; risk (including reputational risk from excessive rewards); predictability; proportionality; and alignment to culture.²⁸ This approach is aligned with the recent evolution in the Code towards more explicit recognition of non-financial stakeholder interests²⁹ and, by recognising that purpose and values should drive remuneration, leaves open a range of solutions that may suit different contexts.³⁰ Viewed in this light, efficient remuneration policies and practices would likely differ over time, across sectors and by company.³¹ At this point in time, our evidence suggests that the Code's reference to

²⁷ The 2018 UK Corporate Governance Code ("2018 CG Code), Part 5, Principle P.

²⁸ The 2018 CG Code, Provision 40.

²⁹ The 2018 version of the Code was the first to refer explicitly to stakeholder engagement and participation. See especially Principle D and Provision 3 of the 2018 CG Code.

³⁰ The 2012 Kay Review suggested aligning any bonuses paid to the executives to the performance of the company in the long-term, by providing long-term incentive schemes only in the form of company shares to be held at least until after the executive has retired from the business. It was also stressed that rewards should reflect long-term value creation rather than the amount or volume of transactions. See *The Kay Review of the UK Equity Markets and Long-Term Decision Making* (Final Report, July 2012) 79 <<http://www.bis.gov.uk/kayreview>> accessed 5 February 2020. However, The UK Government rejected the proposals; arguing that the changes suggested by the Kay Review should be achieved by promoting the development of good practice by companies, rather than by mandating a particular structure of company directors' remuneration packages. BIS, *Building a Culture of Long-term Equity Investment, Implementation of the Kay Review Progress Report* (2014) 42 <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/367070/bis-14-1157-implementation-of-the-kay-review-progress-report.pdf> accessed 5 February 2020.

³¹ The banking sector represents the most prominent example of regulatory intervention to limit the risks arising from incentives, with bonus caps being adopted in the EU and the UK in response to the global financial crisis.

remuneration not rewarding poor performance has been widely disregarded, albeit that we see some moderation in recent years as regulatory intervention has increased.

To improve corporate accountability, in addition to an upsurge in shareholder activism, governments have taken up the issue through regulatory actions. The UK, as an early mover on “say on pay” and as a jurisdiction that has traditionally emphasised shareholder primacy in its corporate governance framework,³² provides an interesting test case for these claims made by proponents and opponents of enhanced shareholder voice (as discussed above). The next section discusses the evolution of the UK legal framework.

2. Evolution of the UK Legal Framework

Notwithstanding the increased level of disclosure³³ introduced with the 1995 Greenbury Report,³⁴ the upward trend for executive remuneration did not change.³⁵ Major contributors to this outcome include the limited details required for disclosure, the composition of remuneration committees and, above all, the companies’ very limited recourse to shareholder voting in relation to remuneration reports.³⁶

³² A Keay, ‘Moving Towards Stakeholderism? Enlightened Shareholder Value, Constituency Statutes and More: Much Ado about Little?’ (2011) 22 European Business Law Review 1.

³³ “Increased” from the default rules on disclosure set out under section 232 CA 1985. See I Ramsay, ‘Directors’ and Officers’ Remuneration: The Role of the Law’ (1993) Journal of Business Law 351, 355.

³⁴ The Final Report of the Study Group on Directors’ Remuneration (1995) (“Greenbury Report”), see Sections B and C and Recommendations, paras 5.28-5.33 <www.ecgi.org/codes/documents/greenbury.pdf> accessed 22 February 2019. The changes introduced by Greenbury Report were later incorporated in the Combined Code (2000) <http://www.ecgi.org/codes/documents/combined_code.pdf> accessed 22 February 2019.

³⁵ See M Conyon and K Murphy, ‘The Prince and the Pauper? CEO Pay in the US and in the UK’ (2000) 110 Economic Journal 643 and Department of Trade and Industry (DTI), ‘Directors’ Remuneration: A Consultative Document’ (1999), Chapter 2.

³⁶ According to a PricewaterhouseCoopers study titled ‘Monitoring of Corporate Governance Aspects of Directors’ Remuneration’, a report for the DTI appearing as Annex A to the DTI, ‘Directors’ Remuneration: A Consultative Document’ *ibid*, of 270 companies monitored, only 7 invited the shareholders to approve the report, representing a 3% compliance rate.

The Government reaction to pay inflation stated in the 1999 DTI paper titled ‘Directors’ Remuneration: A Consultative Document’³⁷ led to legal reform and, in particular, to the enactment pursuant to section 257 of the Companies Act 1985 of secondary legislation in the form of Directors’ Remuneration Report Regulations in 2002.³⁸

Two important changes in the Companies Act 1985 originated from this newly enacted legislation. The first one was a new section 234B, which gave effect to a new Schedule 7A requiring quoted companies to produce a detailed directors’ remuneration report for each financial year. In addition to the composition of the remuneration committee, this included a detailed explanation of a company’s policy on director remuneration with specific evidence of any performance condition with regards to entitlements to share options,³⁹ or under a long-term incentive scheme,⁴⁰ notice periods, termination arrangements,⁴¹ particulars relating to service contracts with directors, the remuneration of each individual director⁴² and reference to possible significant payments to former directors.⁴³ The second important change was a new section (241A) of the Companies Act 1985 which introduced a mandatory shareholder (advisory) vote on the same remuneration report.

While the mandatory disclosure provisions partly overlapped with those already contained in the UK Listing Rules,⁴⁴ the shareholder “advisory vote” was as an absolute novelty. It was designed to give shareholders a powerful and more focused mechanism for intervention with

³⁷ DTI, ‘Directors’ Remuneration: A Consultative Document’ (n 35). On the DTI proposed changes and the preparatory works to the reform, see B Cheffins and R Thomas ‘Should Shareholders Have a Greater Say over Executive Pay?: Learning from the US Experience’ (2001) 1 *Journal of Corporate Law Studies* 277.

³⁸ Directors’ Remuneration Report Regulations 2002 (SI 2002/1986).

³⁹ Paragraphs 7- 9 Schedule 7A CA 2006.

⁴⁰ Paragraphs 10 and 11 *ibid*.

⁴¹ Paragraphs 6(1)(d) and 15 *ibid*.

⁴² Paragraph 6 *ibid*.

⁴³ Paragraph 14 *ibid*.

⁴⁴ E.g. the former rule 9.8.8 of the UK Listing Rules according to which companies admitted to Premium Listing on the London Stock Exchange had to disclose their remuneration policy and information on each director’s pay.

management and directors, but at the same time avoid directly interfering with the board's ability to negotiate remuneration packages with its executives. Depending on the effect of the vote on remuneration packages, the "advisory vote" also had the indirect benefit of stimulating media reaction (possibly leading to public outrage) and therefore operated as a constraint for managers under threat of market reaction and negative social costs.⁴⁵

3. The Current Legal Framework in the UK

The impact of the 2002 reform in curbing executive salary inflation was muted.⁴⁶ Rejections of remuneration reports were rare. Even in the period following the financial crisis, the level of dissent remained almost negligible, especially in large companies,⁴⁷ with mixed evidence on the outcome of the changes in accommodating shareholders' dissenting votes.⁴⁸ In particular, while the "advisory vote" was a means to test the effectiveness of a formal expression of outrage by shareholders to remuneration arrangements disclosed in the remuneration report (e.g. changes to remuneration practice in the following remuneration report), the consequences of the vote did not prove to be conclusive. Other concurring variables and explanations to changes of remuneration arrangement in the subsequent

⁴⁵ L Bebchuk et al., 'Managerial Power and Rent Extraction in the Design of Executive Compensation,' (2002) 69(3) University of Chicago Law Review 751, 788. A critical view on the effectiveness of outrage as constraint on executive remuneration as unsupported by conclusive empirical evidence is provided by K Murphy, 'Explaining Executive Compensation: Managerial Power versus the Perceived Cost of Stock Options' (2002) 69(3) University of Chicago Law Review 847, 857.

⁴⁶ See M Petrin, 'Executive Compensation in the United Kingdom – Past, Present, and Future' (2015) 36(7) Company Lawyer 196 and C Villiers, 'Controlling Executive Pay: Institutional Investors or Distributive Justice?' (2010) 10 Journal of Corporate Law Studies 309, 319-323.

⁴⁷ Especially in large companies. See A Dignam, 'Remuneration and Riots: Rethinking Corporate-Governance Reform in the Age of Entitlement' (2013) 66(1) Current Legal Problems 401. In 2009 around one fifth of FTSE100 companies had more than 20% of their shareholders withhold support for their remuneration reports according to PwC, 'Executive Compensation: Review of the Year 2009: Is Pay for Performance a Force for Good' (2010) <<https://www.pwc.co.uk/assets/pdf/executive-compensation-review-of-the-year-2009-pwc.pdf>> accessed 22 February 2019].

⁴⁸ Evidence from 2003 to 2005 is available in K Sheehan, 'Is the Outrage Constraint an Effective Constraint on Executive Remuneration? Evidence from the U.K. and Preliminary Results from Australia' (2007) (unpublished manuscript <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=974965> accessed 22 February 2019).

remuneration reports were also plausible (e.g. the introduction of new corporate governance guidelines such as the Combined Code).

Moreover, remuneration reports have become increasingly lengthy and complex over time, making it difficult to identify the main facts and figures, which were often buried in a raft of other information and above all, often “lacking in information which shareholders have said they would find helpful, particularly in relation to the link between pay and performance.”⁴⁹

Ferri and Maber carried out an empirical investigation on the impact of “say on pay” on the level of executive remuneration after the introduction of the 2002 Regulations.⁵⁰ Although their study covered only a period up to 2005, it clearly highlighted that the trajectory on pay inflation did not differ from the pre-law reform period, with some relevant pay-performance sensitivity only in relation to companies with high levels of shareholder dissent in the first year of the shareholder advisory vote and those where excess pay was significant in the period before the introduction of the directors’ remuneration report.⁵¹

In light of the flaws in the combined mechanism of mandatory disclosure and “advisory votes” to reduce pay inflation and its limited influence in the alignment of remuneration and performance, the UK Government initiated an extensive consultation,⁵² inviting business

⁴⁹ BIS, ‘Directors’ Pay: Consultation on Revised Remuneration Reporting Regulations’ (June 2012) <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/31358/12-888-directors-pay-consultation-remuneration-reporting.pdf> accessed 22 February 2019.

⁵⁰ Ferri and Maber (n 9).

⁵¹ A critical evaluation of the earlier version of Ferri and Maber’s paper is provided by J Gordon, “‘Say on Pay’: Cautionary Notes on the UK Experience and the Case for Shareholder Opt-In’ (2009) 46 Harvard Journal on Legislation 323, 344-348.

⁵² BIS, ‘Executive Remuneration: Discussion Paper’ (September 2011) <www.bis.gov.uk/Consultations/executive-remuneration-discussion-paper>; BIS, ‘The Future of Narrative Reporting: Consulting on a New Reporting Framework’ (September 2011) <www.bis.gov.uk/Consultations/future-of-narrative-reporting-further-consultation?cat=closedawaitingresponse>; BIS, ‘Executive Pay: Shareholder Voting Rights Consultation’ (March 2012) <<http://www.bis.gov.uk/Consultations/executive-pay-shareholder-voting-rights?cat=closedawaitingresponse>> accessed 22 February 2019; and especially BIS, ‘Directors’ Pay: Consultation on Revised Remuneration Reporting Regulations’ (n 49).

leaders, investors, academics and governance experts to express their views on the ways in which the link between pay and performance could be strengthened.⁵³

The proposals which emerged from that consultation then became part of the Enterprise and Regulatory Reform Act 2013. The contents of the remuneration report are now set out in Schedule 8 of the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008,⁵⁴ as amended by the Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013.⁵⁵ The remuneration report is structured in two parts.⁵⁶ The Companies (Directors' Remuneration Policy and Directors' Remuneration Report) Regulations 2019/970⁵⁷ amended the Companies Act 2006 regarding the availability of the remuneration report on the website – most importantly it must be made available free of charge on the company's website for 10 years, to show the split of fixed and variable remuneration awarded to each director each year.⁵⁸

First there is the “annual report” on remuneration. This is an account as to how the directors' remuneration policy has been implemented in the light of the actual payments made to directors in the last financial year.⁵⁹ According to section 439 Companies Act 2006, shareholders have an annual “advisory vote” (e.g. the vote will not have consequences on the validity of any remuneration paid to directors) on a resolution to approve it. The report has to include a single total remuneration figure for every director for the current and preceding financial year, summarised in a table that evidences salary and fees as money or assets

⁵³ BIS, ‘Executive Remuneration, Discussion Paper: Summary of Responses’ (January 2012) <www.bis.gov.uk/assets/biscore/business-law/docs/e/12-564-executive-remuneration-discussion-paper-summary-responses.pdf> accessed 22 February 2019.

⁵⁴ Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (SI 2008/410).

⁵⁵ Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013 (SI 2013/1981).

⁵⁶ See Part 3 and Part 4 of the Schedule 8 as amended by the Regulations 2013.

⁵⁷ Implementing the provisions of SRD II.

⁵⁸ See s 430 CA 2006 for more details.

⁵⁹ Part 3 Schedule 8 *ibid*.

received or receivable as a result of the achievement of performance measures or targets, earnings from any long-term incentive scheme and pension related benefits.⁶⁰ Moreover, the report must show for each director the total pension entitlements, scheme interests (such as those relating to shares and options) awarded during the financial year, payments to past directors, payments for loss of office, and an outline of directors' shareholding and share interests in the company.⁶¹ If a company fails to pass this resolution in a year in which the remuneration policy was not put to a shareholder resolution, this will trigger the need for the company to put the remuneration policy to shareholders the following year.⁶²

The second part of the remuneration report is the directors' "remuneration policy." According to section 439A Companies Act 2006 (which came into force on 1 October 2013) shareholders have a "binding vote" on a resolution to approve the directors' remuneration policy at least every three years. The director's remuneration policy sets out the policy of the company with respect to the making of executive remuneration payments and payments for loss of office. If a company wishes to make any changes to the remuneration policy, it will have to put the new policy to shareholders for approval at a general meeting.⁶³ Also, if a company loses a vote on its remuneration policy, a new remuneration policy will need to be brought to a vote at the next general meeting or AGM.⁶⁴

Directors who breach the approved directors' remuneration policy will not be entitled to receive remuneration and loss of office payments.⁶⁵ Arrangements that are not consistent with the policy will only be binding if the relevant payment is specifically authorised by way of a

⁶⁰ For further details, see, paras. 4-12, Schedule 8 *ibid.*

⁶¹ Paras. 13-17 Schedule 8 *ibid.*

⁶² Section 439A (2)(a) CA 2006.

⁶³ Part 4 of the Schedule 8 *ibid.*

⁶⁴ Section 439A (2A) CA 2006. This is an important change to the law made by the Companies (Directors' Remuneration Policy and Directors' Remuneration Report) Regulations, Pt 2(2) reg. 20(d), implementing the provisions of SRD II.

⁶⁵ Sections 226B and 226C CA 2006.

shareholder resolution, based on a memorandum setting out the amount and particulars of the proposed payment.⁶⁶ An obligation to make a payment that would be in contravention of these provisions has no effect.⁶⁷

4. Timeline for the Current Framework

The current legal framework involving the need to produce a Directors' Remuneration Report with a separate policy and implementation part took effect on 1 October 2013 and affects AGMs held in reporting years commencing on or after that date (i.e. spring/summer 2014).⁶⁸ This means that the first companies to comply with the new regime were those with a financial year beginning on 1 October 2013. All companies must have successfully sought approval for a remuneration policy by no later than the start of the second financial year to begin after the reforms come into force. For a typical company with December as its year-end, that meant by the 1 January 2015.

The restrictions on remuneration and loss of office payments in the Chapter 4A of the Companies Act 2006 did not take effect until the start of the second financial year to begin after the reforms come into force, or at an earlier date of the company's choosing (any date after a remuneration policy has been approved). The Chapter 4A restrictions did not apply to any remuneration or loss of office payment required to be made as part of an agreement entered into, or other obligation arising, before 27 June 2012 and which has not been renewed or amended since.⁶⁹

⁶⁶ Section 226D (1) CA 2006.

⁶⁷ Section 226D (5) CA 2006.

⁶⁸ Section 82 (1) Enterprise and Regulatory Reform Act 2013.

⁶⁹ Sections 82(2)-(4) Enterprise and Regulatory Reform Act 2013.

Hence, the relevant timeline for the current framework on “say on pay” is presented in Table 1:

[Insert Table 1 about here]

C. The Scope of the Analysis and Hypotheses

Our main objective is to assess the impact of “say on pay” regulations on the level of total remuneration paid to executive directors in the UK over the period 1999-2018. That timeframe encompasses two regulatory periods: the first (08/2003-09/2014: V1 in the tables) in which shareholders had only an advisory vote; and the second (10/2014-12/2017: V2 in the tables) in which shareholders also had a binding vote on pay policy. V0 in the tables, where applicable, refers to the period prior to V1 (01/1999-07/2003) and is the base period for comparison.

Formally, our first hypothesis and its sub-parts are stated as follows:

Hypothesis 1: All else being equal, “say on pay” regulations are effective.

Hypothesis 1a: “Say on pay” regulations constrain the excess level of (total) remuneration.

Hypothesis 1b: “Say on pay” regulations constrain the excess growth of (total) remuneration.

By “effective” we mean that the effect of “say on pay” regulations would, at a minimum, satisfy hypothesis 1a or 1b. For this purpose, we take excess remuneration to mean the difference between the actual/observed pay and the expected pay estimated/implied from our sample.⁷⁰ This difference or “gap” between the two pay measures is what the common

⁷⁰ See the model specification in Appendix 1 and Table 2 for a detailed explanation. The variable definitions are displayed in Appendix 2 Table 1.

economic determinants from the literature cannot explain and therefore considered to be excessive. Note that there is no standard definition for “excessive” remuneration.⁷¹ Alternatively, it can refer to a ratio over average earnings in the same company or in the population.⁷²

Additionally, we conduct the sensitivity analysis for our main test using total remuneration (H1a) by considering two aspects separately – corporate governance (H2) and Main Market listing requirements (H3). Our second hypothesis (H2) focuses on the perceived negative impact of board size on its effectiveness generally and by implication in setting appropriate levels of remuneration. While that aspect of board operation has attracted closer attention in the US⁷³ (where the size and composition of boards typically differs from the UK), it is also evident in the UK.⁷⁴ Furthermore, on the director level, we expect the impact of the regulations to be stronger for those whose pay is considered excessive.⁷⁵

Our second hypothesis is formally stated as follows:

Hypothesis 2: The impact on total remuneration is expected to be more pronounced for firms with a larger board of directors and for executive directors with excess pay.

⁷¹ S Mason et al., ‘Say-On-Pay: Is Anybody Listening?’ (2016) 20(4) *Multinational Finance Journal*, 273

⁷² BEIS, *Executive Rewards* (n 18).

⁷³ D Yermack, ‘Higher Market Valuation of Companies with a Small Board of Directors’ (1996) 40 *Journal of Financial Economics* 185; J Coles et al., ‘Boards: Does One Size Fit All?’ (2008) 87 *Journal of Financial Economics* 329; D Jenter and F Kanaan, ‘CEO Turnover and Relative Performance Evaluation’ (2015) 70(5) *Journal of Finance* 2155.

⁷⁴ M Conyon and S Peck, ‘Board Size and Corporate Performance: Evidence from European Countries’ (1998) 4 *The European Journal of Finance* 291; M Lasfer, ‘On the Monitoring Role of the Board of Directors: The Case of the Adoption of Cadbury Recommendations in the UK’ (2004) 9 *Advances in Financial Economics* 287; and P Guest, ‘The Impact of Board Size on Firm Performance: Evidence from the UK’ (2009) 15 *European Journal of Finance* 385.

⁷⁵ Conyon and Sandler (n 9).

The third hypothesis (H3) focuses on the fact that firms listed in the AIM (Alternative Investment Market) Index are not within the scope of the UK “say on pay” regulations and therefore provide a comparator in which the influence of “say on pay” regulations is absent. While AIM-listed firms differ across several dimensions from firms listed in the All-Share Index (Main Market), we apply several control variables (detailed below) to take account of differences between firms across the entire set of firms in our sample. That said, there remain two clear areas where AIM firms differ from All-Share firms. The first is with respect to the scope of the 2018 CG Code, which applies to the latter but not the former. As the Code could be a proxy for superior corporate governance (and that is its implicit claim), it might be expected that All-Share firms would be better equipped to control remuneration. The second is that because “say on pay” regulation is a driver for broader shareholder engagement on remuneration (and evidence suggest that it is⁷⁶), there may be effects that extend beyond the votes cast in the “say on pay” process for All-Share firms that are not felt by AIM firms.

Finally, our third hypothesis is as follows:

Hypothesis 3: The impact on total remuneration is expected to be more pronounced for firms in the FTSE All-Share Index than those in the FTSE AIM All-Share Index.

D. Results

1. Sample

We form our sample from companies listed in the FTSE All-Share Index and AIM All-Share Index and headquartered in the UK between 1999 and 2018. From the BoardEx database, we

⁷⁶ See Sheehan (n 48).

obtain remuneration data, i.e., total remuneration and its main components: salary, bonus, and equity-linked remuneration, for executive directors in these firms. Then we match our sample with available accounting data from the Datastream database. The final sample used in our regression analyses consists of more than 31,500 person-firm-year observations that represent about 370 unique companies in the FTSE All-Share Index and about 580 unique companies in the FTSE AIM All-Share Index over the period 1999-2018. The descriptive statistics (mean and standard deviation) and correlation matrix for the executive pay regressions (FTSE All-Share firms) are reported in Appendix Table 2. The table also shows the mean of these variables in three different time periods separated by the two regulations under study.

2. Primary Results

In this section, we investigate the extent to which “say on pay” regulations might affect the level of total remuneration (H1a) and the growth of total remuneration (H1b) after controlling for effects of important determinants of executive director remuneration. Table 2 reports the multivariate regression results for these two remuneration measures.

[Insert Table 2 about here]

Regarding the level, the baseline model results are shown in Column 1. The main variable of interest is the *Time Trend* variable, which estimates the mean growth rate of the remuneration that is not captured by the control variables over the entire sample period. As displayed in Column 1, the coefficient estimate is 0.035 with statistical significance at the 1% level. This indicates that, from 1999 to 2018, after controlling for performance and other economic determinants, on average the natural logarithm of total pay increases by approximately 3.54% annually, which is economically and statistically significant. In Column

2, the key variables are the two V period dummy variables. As mentioned before, they capture the incremental or marginal effect of each regulation on excess pay, or the pay that is not explained by the control variables. The estimates of these dummy variables suggest that, after taking into account the determinants of remuneration as well as its time trend, the excess level of total pay on average is significantly higher since August 2003 (V1), but since October 2014 (V2) it has significantly lowered.

In terms of the growth of remuneration (H1b), we calculate the change of pay for each director in the same firm over time and regress it on the same set of independent variables as in the previous analysis. The results are shown in Columns 3 and 4. Note that the sample size decreases, as for this analysis only those who have multiple-year terms are included. The results also suggest that the excess growth of total pay is higher until October 2014 (V2). In addition, the time trend of the growth seems to be driven by the V1 period, from August 2003 to October 2014. Overall, the results suggest that say-on-pay regulations seem to have become effective in constraining total remuneration of executive directors when the binding vote is introduced.

3. Sensitivity Analysis

3.1. Corporate Governance

In this section, we provide a sensitivity analysis of total pay. Specifically, we examine the impact of regulations between four different subsets of firms: those with a larger board versus their counterparts, and those with excess pay versus their counterparts. We expect the impact to be stronger in firms with inferior governance: larger board size⁷⁷ and excess pay (H2).

⁷⁷ Guest (n 74) provides UK evidence of the negative impact of board size on firm performance and argues that problems of poor communication and decision-making undermine the effectiveness of large boards. The author also provides a summary of previous studies on the effect of board size on performance which mostly show a

Regarding board size, we form two groups, “larger board” versus “smaller board” firms, by comparing the board size to the top quartile of the number of directors, which is 11. If a company’s board has at least 11 directors, then it is assigned to the “larger board” group.⁷⁸ In other words, the “smaller board” group consists of companies that have at most 10 directors.

As for excess pay, following Conyon and Sadler,⁷⁹ to identify “excess pay”, we first estimate pay Model (1) without the time trend variable. We then calculate the residuals, or the error term that is considered excess pay, from the regression and rank them – a higher residual indicates that the pay deviates more from its predicted value, based on our chosen underlying economic model. We classify those whose residuals ranked in the top quartile into the “excess pay” group and those remaining into the “non-excess pay” group.

Table 3 shows the multivariate regression results in these separate subsets of firms. The results are consistent with our expectations. Specifically, the V2 coefficient estimates in Columns 1 and 3 are negative and statistically significant. In addition, they are much more negative than those in Columns 2 and 4, indicating that the excess total pay in firms with inferior corporate governance is further reduced after V2.⁸⁰ This evidence also suggests that the binding “say on pay” vote in V2 has had a greater impact on firms that can benefit more from a strengthened shareholder voice.⁸¹

[Insert Table 3 about here]

negative relation across countries. We argue that ineffective boards are associated with inferior governance and are more likely to result in excess pay.

⁷⁸ This definition is consistent with Guest, *ibid*, which shows and concludes that the optimal size lies at 9 and below as for all performance measures the impact of board size on firm performance is negative for all board sizes greater than 9.

⁷⁹ See Conyon and Sadler (n 9). This approach is also along the lines of J Core and W Guay, ‘The use of equity grants to manage optimal equity incentive levels’ (1999) 28 *Journal of Accounting and Economics* 151 and Ferri and Maber (n 9).

⁸⁰ The difference between these two coefficient estimates of V2 in Columns 1 and 2 (-0.290 versus -0.123) is statistically insignificant at the 10% level (Prob > chi² = 0.1002). Similarly, the difference between those in Columns 3 and 4 (-0.226 versus -0.100) is statistically significant at the 5% level (Prob > chi² = 0.0105).

⁸¹ We conduct similar tests and don’t find significant differences for V1.

3.2. FTSE All-Share and AIM Firms

Furthermore, as mentioned earlier, we expect the effect of the “say on pay” regulations, if any, to be more pronounced for the companies listed in the FTSE All-Share Index than those listed in the FTSE AIM Index, as the latter set of firms is less affected by these regulations.⁸²

To test this hypothesis (H3), we replicate the analysis before by regressing the total remuneration of executive directors in these four market indexes separately. The results are reported in Table 4. Consistent with our conjecture, the coefficient estimates of two regulations are similar across the main markets, FTSE 100, FTSE 250, and FTSE Small, with varying degrees of economic and statistical significance throughout. Specifically, the level of total pay in each of the three main markets shows a positive time trend, and after V1 the higher level is still seen across these companies. However, the lowered level after V2 is seen predominantly in FTSE 100 companies and to a lesser extent also in FTSE 250 companies. On the other hand, for the FTSE AIM market, we find no evidence that total pay is affected by changes in shareholder behaviour driven by the regulations under study (which do not apply to those companies).⁸³ Therefore, this provides additional supporting evidence that the regulations are effective with respect to constraining executive director pay.⁸⁴

[Insert Table 4 about here]

4. “Say on Pay” and the role of incentives

⁸² The descriptive statistics (mean) for the executive pay regressions for firms listed in four different market indexes, FTSE 100, FTSE 250, FTSE Small (all of which are part of the FTSE All-Share Index) and FTSE AIM are shown in Appendix Table 3 Panel A.

⁸³ This corresponds with the findings of Ferri and Maber (n 9), who run tests with firms listed on AIM and find that AIM companies did not experience a comparable increase in pay-performance.

⁸⁴ We replicate Table 4 with total remuneration data of CEOs and non-executive directors. The results are similar and are reported in Appendix 2, Table 3 Panels B and C, respectively.

Our findings so far provide evidence that the recent “say on pay” regulation, V2, is effective in constraining excess executive director remuneration. A natural question arises: Is the regulation effective in terms of enhancing incentives too? To answer this question, we first conduct the main tests by focusing on the level of equity-linked remuneration (forward looking) and report the coefficient estimates in Appendix Table 4 Columns 1-2. We find that the average excess equity-linked pay increases significantly over time, and the increase in equity-linked pay seems stronger since V1 but is lowered after V2. This finding is similar to the results of total remuneration.

With regard to pay-performance, we follow Ferri and Maber⁸⁵ to examine whether “say on pay” regulations enhance sensitivity of pay to realised firm performance (backward looking). Specifically, we use cash-based pay (salary plus bonus) as the dependent variable⁸⁶ and consider both ROE and ROA for performance measures. We calculate industry ROE and industry ROA for positive and negative industry-adjusted returns. We conduct separate regressions in three regulatory or time periods and report the coefficient estimates in Appendix Table 4 Columns 3-5. Consistent with the results in previous tests, cash-based pay is more sensitive to shareholder returns. In particular, the pay sensitivity to poor market performance is enhanced after V1⁸⁷ (0.218) and V2 (0.585).⁸⁸ This provides supporting

⁸⁵ Ferri and Maber (n 9).

⁸⁶ Due to the formulaic nature of most cash-based bonus plans, there is typically a direct structural link between realised cash pay and realised operating performance (e.g.: P Dechow et al., ‘The Effect of Restructuring Charges on Executives’ Cash Compensation’ (1994) *The Accounting Review* 69, 138; J Gaver, K Gaver, ‘The Relation between Nonrecurring Accounting Charges and CEO Cash Compensation’ (1998) *The Accounting Review* 73, 235; K Murphy, ‘Executive Compensation’ in: O. Ashenfelter and D Card, (eds.), *Handbook of Labor Economics* Vol. 3 (North-Holland, Amsterdam, The Netherlands 1999) 2485; Ferri and Maber (n 9)). The link between equity-based pay and realised performance is less clear. In addition, most UK firms employ in their equity plans some performance-based vesting conditions that are likely to be key lever used by boards to obtain desired sensitivity of future realised equity pay to future performance (e.g. M Carter et al., ‘Explicit Relative Performance Evaluation in Performance Vested Equity Grants’ (2009) 14 *Review of Accounting Studies* 269; Ferri and Maber (n 9)).

⁸⁷ This finding is consistent with Ferri and Maber (n 9) who show that “say on pay” had a moderating effect on the level of CEO compensation conditional on poor performance.

⁸⁸ The difference between these two coefficient estimates is statistically significant at the 1% level.

evidence that the introduction of the binding vote leads to greater accountability for poor performance, which is consistent with calls to eliminate rewards for failure.

Overall, our evidence suggests that “say on pay” regulations have varying degrees of impact in terms of constraining the excess level or growth of total remuneration. Consistent with Ferri and Maber,⁸⁹ we find that V1 does not affect or constrain the excess level or growth of total remuneration paid to executive directors in the UK. However, we find evidence that the growing trends stop or even reverse after V2, and the reduced total remuneration seems to be associated with the decline in equity-linked pay and enhanced sensitivity of cash-based pay to poor performance. This indicates a potential structural change in the remuneration policy for executive directors – a higher proportion of direct remuneration that is more sensitive to (poor) realised company performance, with less long-term incentive pay linked to future performance.

E. Discussion and Further Analysis

In this section, we provide a number of additional analyses on the backward-looking remuneration from the remuneration report and forward-looking remuneration from the remuneration policy, with a focus on the most recent “say on pay” regulation of 2013.

First of all, we once again conduct the regression analysis in Section D.2 above (“Primary Results”) but replacing the Time Trend variable with separate and individual year dummy variables, starting from 2003 until 2018, while keeping the rest of the model specification intact. The regression coefficient of each year dummy variable indicates the difference in excess pay between that particular year and the base period of 1999-2002, the time period before the first “say on pay” regulation. Therefore, this allows us to have a better

⁸⁹ Ferri and Maber (n 9).

understanding of patterns over time in excess pay beyond the average estimates of time periods in different regulatory regimes discussed in Section D.2. For illustrative purposes, we plot the regression coefficients in Figure 2. In addition to total pay, we include three main components – salary, bonus and equity-linked remuneration – and examine companies in three main market indexes for this analysis.

[Insert Figure 2 about here]

As shown in Figure 2, excess total pay tends to increase over time, and this trend is more pronounced for larger companies. There is a similar trend in excess salary pay despite the growth being more moderate. The regression coefficients in excess bonus pay are relatively more volatile or dispersed and seem significantly affected by economic factors or events such as the 2008-09 global financial crisis. Regarding equity-linked pay, the patterns are similar to excess total pay, and both show that this growing trend has been restrained since the 2013 “say on pay” regulation. Collectively, the evidence suggests that the increase in total remuneration since 2003 is driven by the increase in the equity-linked pay component and the constraints observed after the 2013 regulation can be attributed to equity pay.

In addition to backward-looking remuneration, we are interested in exploring other aspects associated with executive directors’ remuneration potentially affected by this regulation, such as the impact of regulation on the framing of remuneration policy. For this last part of analysis, we manually check annual reports for 28 FTSE 100 companies that have survived throughout the entire period of 2011-2018, with a focus on the remuneration policy section. We extract information regarding length of annual report as well as the criteria and benchmarks set for bonuses and long-term incentive plans, the forward-looking remuneration.

We report results of some summary statistics in Figure 3. Not surprisingly, due to the new disclosure requirements, the length of annual report on average has increased from approximately 138 pages in 2011 to 192 pages in 2018. The increase in means is largest in 2014 (12 pages) and the increase in medians is largest in 2016 (16 pages).

[Insert Figure 3 about here]

In terms of the remuneration policy, we find that for bonus pay in 2011 on average there are about 3 criteria and 1.5 benchmarks set; in 2018, there are 4 criteria and benchmarks set. The gap between criteria and benchmarks set out in the remuneration policy has greatly narrowed around 2014 and remained so afterwards. We don't find that for long-term incentive plans, however. The number of criteria and benchmarks and the gap between the two seem stable over this time period. Altogether, these findings suggest that the 2013 "say on pay" regulation also enhances the disclosure of remuneration reporting by inducing companies to provide more clearly defined forward-looking variables that capture the structure of future pay in their remuneration policy. This is more apparent in bonus pay, but less so in equity-linked pay. This finding could be due to the fact that bonus payouts are easier to understand and also to monitor for shareholders and are likely the pay component linked to what they care most about: namely, near-term accounting or business performance.

F. Shareholder engagement and its links with executive pay

While "say on pay" represents a formal process for shareholders to influence management decision-making, there are also informal options open to shareholders.⁹⁰ Shareholder activism

⁹⁰ See e.g. S Bainbridge, 'Preserving Director Primacy by Managing Shareholder Interventions' (UCLA School of Law Law-Econ Research Paper No. 13-09 2013)

covers a broad spectrum of activities and is practised in multiple forms depending on the aim and resources of the activist, including: the right to vote; calling shareholder meetings; drafting proposals for the agenda of such meetings; electing, re-electing, and sometimes replacing the directors; ratifying board decisions; and engaging in informal dialogue with the management. There is, however, no consensus regarding the desirability or effectiveness of shareholder activism.

In the UK institutional investors (such as investment funds, insurance companies, pension funds, sovereign wealth funds, hedge funds and exchange traded funds) currently own a large proportion of shares listed on the regulated markets. In some instances they will take concerns over portfolio companies directly to the management (the voice option) but they will often be constrained in selling out (the exit option) due to the size of their holding or because they follow a policy of holding a balanced portfolio.⁹¹ In recent years, hedge funds – which are traditionally more activist – have brought an additional dimension to activism as a strategy to improve corporate performance and enhance share prices but evidence of the success of that strategy remains elusive.⁹²

Opponents of shareholder activism note that it usurps the role of the board and that the possibility of short-term pressures from shareholders is a significant factor in favour of board insulation from shareholders.⁹³ Moreover, the benefits of shareholder activism have been doubted on the basis that shareholders in general may lack appropriate incentives to engage in activism due to “rational apathy” – the costs of engagement are higher than the expected benefits – and they would prefer to sell their shares if they are unhappy with the

<http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2298415> accessed 5 December 2019; P Davies, ‘Shareholders in the United Kingdom’ (ECGI) - Law Working Paper No. 280/2015) <<http://ssrn.com/abstract=2557680>> accessed 5 December 2019.

⁹¹ C Mallin, *Corporate Governance* (5th edn, OUP 2016) 110ff.

⁹² See further E deHaan et al., ‘Long-Term Economic Consequences of Hedge Fund Activist Interventions’ (December 31, 2018). Rock Center for Corporate Governance at Stanford University Working Paper No. 236 <<https://ssrn.com/abstract=3260095>> accessed 5 February 2020. The role of hedge funds and whether they are entirely short-term orientated is currently vigorously debated in the literature. See e.g.: the discussion between Bebchuk et al. and Lipton & others at Harvard Law School Forum on Corporate Governance & Financial Regulation <<http://corpgov.law.harvard.edu/tag/bebchuk-brav-jiang-study/>> accessed 28 January 2020; B Cheffins, J Armour, ‘The Past, Present and Future of Shareholder Activism by Hedge Funds’ (2011) 37(1) *Journal of Corporation Law* 51; J Coffee Jr, D Palia, ‘The Impact of Hedge Fund Activism: Evidence and Implications’ (ECGI - Law Working Paper No. 266/2014 September 15 2014) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2496518> accessed 28 January 2020.

⁹³ W Bratton and M Wachter, ‘The Case Against Shareholder Empowerment’ (2010) 158 *University of Pennsylvania Law Review* 653.

way the company is being run.⁹⁴ Supporters, on the other hand – amongst which Bebchuk is the most prominent⁹⁵ – argue that shareholder activism increases the long-term value of the company by monitoring closely the managers and preventing abuses of their powers. Nor is the evidence clear with regard to shareholder voting as a form of activism, as the academic research generally shows no clear relationship between voting outcome and the level or structure of executive remuneration in the UK.⁹⁶

While our primary focus is on the impact of the formal mechanism of shareholder voting (i.e. “say on pay”), some account also needs to be taken of the impact of shareholder activism. While that channel for influence has always in principle been available to shareholders it has been given additional traction in the UK by the recent introduction of the Stewardship Code.⁹⁷ The Code sets out good practice recommendations for institutional investors and the 2012 version was applied on a “comply or explain” basis.⁹⁸ The new 2020 Code sets higher expectations for investor stewardship policy and practice and it comprises 12 “apply and explain” Principles for asset owners and asset managers, with reporting expectations relevant to their role. In addition, there are six “apply and explain” Principles for service providers with reporting expectations.⁹⁹ The objective of that Code is to ensure that institutional shareholders properly discharge their (fiduciary) obligations to underlying investors by engaging with portfolio companies to ensure that the interests of underlying investors are appropriately reflected in corporate decision-making. There can be little doubt that the Code encourages shareholder activism but there is currently no consensus regarding its effectiveness.¹⁰⁰

⁹⁴ M Siems, *Convergence in Shareholder Law* (CUP 2007) 89.

⁹⁵ See e.g. L Bebchuk, ‘The Myth of the Shareholder Franchise’ (2007) 93 *Virginia Law Review* 675.

⁹⁶ See for example Gerner-Beuerle, and Kirchmaier (n 9).

⁹⁷ The Stewardship Code was introduced in 2010 and revised in 2012. The most recent reform of the Code took place in 2019 and the 2020 edition is in force from 1 January 2020. For discussion of the role of the Stewardship Code in facilitating shareholder engagement see I MacNeil ‘Activism and Collaboration among Shareholders in UK Listed Companies’ (2010) 5(4) *Capital Markets Law Journal* 419.

⁹⁸ The UK Stewardship Code 2012, 1.

⁹⁹ The UK Stewardship Code 2020, 4.

¹⁰⁰ For instance, Dignam notes that encouraging stewardship in the UK is problematic as it creates an imbalance of power between shareholders and the board, to the detriment of board independence, see: A Dignam, ‘The Future of Shareholder Democracy in the Shadow of the Financial Crisis’ (2013) 36 *Seattle University Law Review* 639, 641. Meanwhile, Cheffins points out that the Stewardship Code is likely to be an ineffective tool in promoting increased shareholder engagement due to increasing fragmentation of ownership and due to the high level of foreign investment, resulting in less than one-third of the shares in UK quoted companies suggests adoption of the Code, see: B Cheffins, ‘The Stewardship Code’s Achilles’ Heel’ (2010) 73(6) *Modern Law Review* 1004, 1025.

Not only the 2020 Stewardship Code, but also the 2017 SRD II puts a lot of emphasis on shareholder engagement by institutional investors and asset managers. Most of the requirements on directors' remuneration contained in SRDII were already provided for in the UK.¹⁰¹ Nevertheless, this Directive looks promising, especially as it underlines the alignment of remuneration with the long-term and sustainable development of companies across the EU.¹⁰² It seems that the 2020 Stewardship Code – due to its “apply and explain” approach and the depth of its provisions – goes beyond the “comply or explain” obligation imposed by the SRD II on institutional investors and asset managers to develop and publicly disclose an engagement policy that describes how they integrate shareholder engagement in their investment strategy.¹⁰³ However, it is argued in the literature that this “comply or explain” obligation goes beyond a mere “soft law” approach and entails a normative expectation that shareholder engagement is part of investment management (and is not far short of imposing a duty to demonstrative engagement), especially if read in the context of Articles 3(h) and 3(i) SRD II, which impose disclosure requirements on institutional investors and asset managers.¹⁰⁴

In the UK concern over the extent and effectiveness of shareholder engagement on remuneration were evident not only in the context of the Stewardship Code, but also the recent UK Corporate Governance Code reforms.¹⁰⁵ In order to strengthen shareholder voting rights, the FRC was invited to revise the UK Corporate Governance Code to set out the steps that companies should take when they encounter significant shareholder opposition to

¹⁰¹ See section B. 3 (The Current Legal Framework in the UK) above for more details.

¹⁰² See e.g. Arts. 9(a)(6), 9(b) (1)(a) SRD II.

¹⁰³ See Art. 3(g)(I) SRD II. The requirements regarding this policy are quite detailed. It should describe how institutional investors and asset managers monitor investee companies on relevant matters, including strategy, financial and non-financial performance and risk, capital structure, social and environmental impact and corporate governance, conduct dialogues with investee companies, exercise voting rights and other rights attached to shares, cooperate with other shareholders, communicate with relevant stakeholders of the investee companies and manage actual and potential conflicts of interests in relation to their engagement.

¹⁰⁴ D Katelouzou, ‘A Case of (Re)Embedding the Institutional Investors and the Corporation?’, in B Sjøfjell, C Bruner, *The Cambridge Handbook of Corporate Law, Corporate Governance, and Sustainability* (CUP 2020) 585; I H-Y Chiu and D Katelouzou, ‘From Shareholder Stewardship to Shareholder Duties: Is the Time Ripe?’, in H Birkmose *Shareholder's Duties* (Kluwer Law International, 2017) 131–52.

¹⁰⁵ BEIS, ‘Corporate Governance Reform: Green Paper’ (November 2016) www.gov.uk/government/uploads/system/uploads/attachment_data/file/584013/corporate-governance-reform-green-paper.pdf and BEIS, ‘Corporate Governance Reform: The Government Response to the Green Paper Consultation’ (August 2017) www.gov.uk/government/uploads/system/uploads/attachment_data/file/640470/corporate-governance-reform-government-response.pdf accessed 27 June 2018.

executive pay and this provision is now incorporated into the 2018 CG Code.¹⁰⁶ A second suggestion was to invite the Investment Association (IA) to implement their proposal to create and maintain a public register of listed companies encountering shareholder opposition of 20% or more to executive pay and other resolutions, along with a record of actions to address these concerns. This register is already available and constitutes a very useful tool in monitoring significant shareholder dissent.¹⁰⁷ Figure 4 shows such shareholder dissent at FTSE All-Share companies – number of different types of resolutions on an annual basis from January 2017 to 17 December 2019 (the more recent update). We find that overall director re-election is the most common resolution title while remuneration report comes in second.

[Insert Figure 4 about here]

In the context of the LTIPs, the Government suggested and already implemented two actions. First, in order to improve long-term incentive arrangements, quoted and UK registered companies with more than 250 UK employees will also need to provide a clearer explanation in remuneration policies of a range of potential outcomes from complex, share-based incentive schemes.¹⁰⁸ Secondly, the 2018 CG Code extends the holding periods for share options from a minimum of three years to five.¹⁰⁹ Regarding pay ratios, UK quoted or registered companies with more than 250 UK employees will be required to report annually the ratio of CEO pay to the average pay of their UK workforce, along with a narrative explaining changes to that ratio from year to year and setting the ratio in the context of pay and conditions across the wider workforce.¹¹⁰ These actions might be associated with the notable decline in (excess) pay of executive directors in 2018 (observed in both Figure 1 and Figure 2).

¹⁰⁶ Provision 4 of the 2018 CG Code, which sets out the procedure when more than 20% of votes have been cast against a resolution.

¹⁰⁷ See <www.theinvestmentassociation.org/publicregister.html> accessed 5 December 2019, for the list of shareholder opposition to “say on pay” in 2017-2019.

¹⁰⁸ Companies (Miscellaneous Reporting) Regulations 2018, reg. 18

¹⁰⁹ Provision 36 of the 2018 CG Code.

¹¹⁰ Companies (Miscellaneous Reporting) Regulations 2018, reg. 17

To conclude, this section suggests that not only the “say on pay” regulation, but also formal and informal pressure by shareholders on boards of directors might have or will have an impact on executive remuneration in the UK.

G. Conclusions

In overall terms our research suggests that “say on pay” regulations can have a material effect on the growth and composition of remuneration when they are framed to provide shareholders with a meaningful vote. In contrast to the first period (V1), in which only an advisory vote was available to shareholders and was associated with no effect on the level or growth of excess total remuneration, the binding vote available in the second period (V2) is linked with a halt in growth and a decline in the role of equity-linked pay. This effect is particularly marked for firms with inferior corporate governance (in the form of large boards). The absence of any material changes in remuneration of directors of AIM-listed firms who are not subject to the UK “say on pay” regulations further supports our findings.

Nevertheless, in light of the continuing presence of significant levels of excess pay, we conclude that “say on pay” has to date had limited success as a regulatory strategy. Moreover, since the capacity of improved disclosure to prompt better informed shareholder action would appear to be largely exhausted as the regime has evolved over the years, the most salient question is where do we go from here? One response might be to let the current regime gain traction, driven in part by the more intense public interest in remuneration. Another response would be to continue to facilitate shareholder engagement, albeit in some instances the shareholders are asset management firms which can exhibit the same remuneration problems they are expected resolve on behalf of their underlying investors. Another relevant point in this context is the role of proxy advisers in making recommendations to asset managers on

how to vote their shares on resolutions at company meetings. Further research could cast light on the capacity of shareholder engagement to resolve remuneration issues prior to the casting of “say on pay” votes, and this is something to which we intend to turn our attention next.

TABLE 1
Timeline for the Current Framework on “Say on Pay”

Year-end	First AGM at which company must report in the new format and put the remuneration policy to a binding shareholder resolution	Date from which all remuneration and loss of office payments must be consistent with the approved policy or approved by a separate shareholder resolution
30 September	Early 2014	1 October 2014
31 December	Spring 2014	1 January 2015
31 March	Summer 2014	1 April 2015
30 June	Autumn 2014	1 July 2015

TABLE 2
Total Remuneration of FTSE All-Share Firms

	Total Pay			
	Level	Level	Growth	Growth
Time Trend (t)	0.035*** (10.13)	0.040*** (8.25)	0.003*** (2.79)	-0.004* (-1.74)
V1 (08/2003-)		0.109*** (2.74)		0.182*** (7.52)
V2 (10/2014-)		-0.161*** (-4.34)		0.009 (0.39)
Controls:				
Firm Size (t-1)	0.188*** (5.78)	0.188*** (5.78)	-0.004 (-0.74)	-0.003 (-0.64)
Growth Opportunity (t-1)	0.027*** (3.00)	0.030*** (3.25)	-0.003 (-0.70)	-0.002 (-0.57)
ROE (t-1)	0.113*** (4.71)	0.109*** (4.52)	-0.158*** (-6.48)	-0.162*** (-6.60)
ROA (t-1)	-0.270 (-1.45)	-0.267 (-1.44)	-0.481*** (-3.32)	-0.477*** (-3.33)
CEO (t)	0.512*** (25.36)	0.517*** (25.69)	0.016** (2.25)	0.020*** (2.73)
Tenure (t)	0.229*** (12.68)	0.202*** (10.61)	-0.192*** (-17.50)	-0.217*** (-19.15)
Age (t)	-0.199* (-1.78)	-0.127 (-1.12)	-0.205*** (-6.24)	-0.158*** (-4.73)
Board Size (t)	0.718*** (6.07)	0.720*** (6.09)	0.002 (0.09)	-0.001 (-0.02)
Portion of NED (t)	1.577*** (7.72)	1.554*** (7.51)	-0.060 (-1.30)	-0.085* (-1.81)
Constant	1.611*** (2.99)	1.276** (2.34)	1.368*** (9.69)	1.151*** (8.03)
R ²	0.512	0.516	0.055	0.061
Industry FE (t)	Yes	Yes	Yes	Yes
Observations	17427	17427	14667	14667

The table shows the determinants of executive director pay. It contains a sample of UK FTSE All-Share companies from 1999 to 2018. The dependent variable contains four metrics of pay: Total Pay Level is the natural logarithm of total pay (total direct compensation plus total equity linked compensation); Total Pay Growth is the difference of the natural logarithm of total pay and that of total pay the year before; Equity-linked Pay Level is the natural logarithm of equity-linked pay (the sum of shares awarded, estimated value of options awarded, and long-term incentive plans awarded); Equity-linked Pay Ratio is the ratio of equity-linked pay over total pay. Time Trend is defined as the fiscal year minus 1999. V1 (V2) is an indicator variable that takes the value of one if the annual report date is after July 2003 (September 2014), and zero otherwise. Firm Size is the natural logarithm of sales; Growth Opportunity is market value to book ratio; ROE is return on equity; ROA is return on assets; CEO is an indicator variable that takes the value of one if the executive director is CEO, and zero otherwise; Tenure is the natural logarithm of years of directorship since year 1999; Age is the natural logarithm of age of the executive director; Board Size is the natural logarithm of size of board of directors; Portion of NED is proportion of non-executive directors. Firm Size, Growth Opportunity, ROE and ROA are winsorized at the 5% level. T-statistics are shown in parentheses. *p < 0.10, **p < 0.05, ***p < 0.01. Industry fixed effects are included and standard errors are clustered on the firm identifier.

TABLE 3
Total Pay and Larger Board and Excess Pay

	Total Pay “larger board”	Total Pay “smaller board”	Total Pay “excess pay”	Total Pay “non-excess pay”
Time Trend (t)	0.050*** (4.52)	0.037*** (7.19)	0.041*** (9.97)	0.034*** (9.75)
V1 (08/2003-)	0.050 (0.63)	0.138*** (2.82)	0.124*** (2.82)	0.073*** (2.65)
V2 (10/2014-)	-0.290*** (-3.02)	-0.123*** (-3.43)	-0.226*** (-6.04)	-0.100*** (-3.24)
Controls:				
Firm Size (t-1)	0.189** (2.33)	0.175*** (5.23)	0.107*** (6.17)	0.254*** (13.72)
Growth Opportunity (t-1)	0.012 (0.66)	0.033*** (3.73)	0.040*** (4.38)	0.028*** (4.73)
ROE (t-1)	0.201*** (3.58)	0.084*** (3.18)	0.098*** (2.93)	0.127*** (7.39)
ROA (t-1)	-0.315 (-0.70)	-0.354* (-1.76)	-0.009 (-0.06)	-0.277* (-1.73)
CEO (t)	0.508*** (17.74)	0.524*** (22.45)	0.530*** (26.15)	0.519*** (27.39)
Tenure (t)	0.229*** (7.93)	0.209*** (10.07)	0.167*** (11.43)	0.275*** (17.77)
Age (t)	-0.155 (-0.76)	-0.175 (-1.49)	-0.062 (-0.73)	-0.220** (-2.49)
Board Size (t)	0.251 (0.83)	0.580*** (4.23)	0.874*** (9.75)	0.550*** (8.06)
Portion of NED (t)	1.870*** (5.04)	1.318*** (5.95)	1.492*** (13.02)	1.417*** (9.10)
Constant	2.479* (1.90)	1.987*** (3.61)	2.645*** (7.38)	0.901** (2.39)
R^2	0.536	0.489	0.755	0.636
Industry FE (t)	Yes	Yes	Yes	Yes
Observations	4916	12511	4357	13070

The table shows the determinants of executive director pay level. It contains a sample of UK FTSE All-Share companies from 1999 to 2018. “Larger board” firms are firms that have at least 11 board of directors. “Excess pay” firms are firms with pay in the top-quartile of residuals from a predicted pay regression. The dependent variable is Total Pay: the natural logarithm of total pay (total direct compensation plus total equity linked compensation). Time Trend is defined as the fiscal year minus 1999. V1 (V2) is an indicator variable that takes the value of one if the annual report date is after July 2003 (September 2014), and zero otherwise. Firm Size is the natural logarithm of sales; Growth Opportunity is market value to book ratio; ROE is return on equity; ROA is return on assets; CEO is an indicator variable that takes the value of one if the executive director is CEO, and zero otherwise; Tenure is the natural logarithm of years of directorship since year 1999; Age is the natural logarithm of age of the executive director; Board Size is the natural logarithm of size of board of directors; Portion of NED is proportion of non-executive directors. Firm Size, Growth Opportunity, ROE and ROA are winsorized at the 5% level. T-statistics are shown in parentheses. *p < 0.10, **p < 0.05, ***p < 0.01. Industry fixed effects are included and standard errors are clustered on the firm identifier.

TABLE 4
Total Pay and Firm Size

	Total Pay FTSE 100	Total Pay FTSE 250	Total Pay FTSE SMALL	Total Pay FTSE AIM
Time Trend (t)	0.059*** (7.72)	0.051*** (6.75)	0.032*** (4.32)	0.024*** (4.62)
V1 (08/2003-)	0.170** (2.49)	0.103* (1.95)	0.122* (1.76)	-0.062 (-0.88)
V2 (10/2014-)	-0.280*** (-4.54)	-0.167*** (-2.88)	-0.016 (-0.27)	0.032 (0.92)
Controls:				
Firm Size (t-1)	0.103 (1.61)	0.104** (2.51)	0.139*** (5.54)	0.082*** (7.78)
Growth Opportunity (t-1)	0.030** (2.01)	0.007 (0.71)	0.015 (1.14)	0.013** (2.09)
ROE (t-1)	0.107** (2.37)	0.102*** (3.03)	0.067** (2.32)	0.134*** (6.63)
ROA (t-1)	-0.618* (-1.69)	-0.392 (-1.53)	-0.153 (-0.75)	0.089 (0.98)
CEO (t)	0.581*** (20.41)	0.479*** (14.07)	0.517*** (17.20)	0.455*** (19.41)
Tenure (t)	0.180*** (6.51)	0.199*** (7.90)	0.245*** (7.70)	0.163*** (7.89)
Age (t)	0.029 (0.18)	-0.192 (-1.04)	-0.325* (-1.84)	-0.020 (-0.21)
Board Size (t)	0.798*** (4.21)	0.287** (2.14)	0.170 (1.39)	0.659*** (8.17)
Portion of NED (t)	1.152*** (4.30)	1.094*** (2.97)	1.148*** (5.69)	0.671*** (5.06)
Constant	2.032* (1.76)	3.782*** (4.57)	3.752*** (5.02)	2.327*** (5.78)
R ²	0.578	0.460	0.453	0.283
Industry FE (t)	Yes	Yes	Yes	Yes
Observations	4682	7497	5248	14330

The table shows the determinants of executive director pay level by sub-markets. It contains a sample of UK FTSE All-Share and FTSE AIM (Alternative Investment Market) companies from 1999 to 2018. The dependent variable is Total Pay: the natural logarithm of total pay (total direct compensation plus total equity linked compensation). Time Trend is defined as the fiscal year minus 1999. V1 (V2) is an indicator variable that takes the value of one if the annual report date is after July 2003 (September 2014), and zero otherwise. Firm Size is the natural logarithm of sales; Growth Opportunity is market value to book ratio; ROE is return on equity; ROA is return on assets; CEO is an indicator variable that takes the value of one if the executive director is CEO, and zero otherwise; Tenure is the natural logarithm of years of directorship since year 1999; Age is the natural logarithm of age of the executive director; Board Size is the natural logarithm of size of board of directors; Portion of NED is proportion of non-executive directors. Firm Size, Growth Opportunity, ROE and ROA are winsorized at the 5% level. T-statistics are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Industry fixed effects are included and standard errors are clustered on the firm identifier.

FIGURE 1
Remuneration of Executive Director over Time

This figure shows means/medians of remuneration of executive directors in FTSE All-Share companies in our sample by company year. Salary is base annual pay. Bonus is an annual payment made in addition to salary. EquityLinked is the sum of shares awarded, estimated value of options awarded, and long-term incentive plans (LTIPs) awarded. DCPension is employer's contribution towards the director's pension scheme.

FIGURE 2
Excess Pay of Executive Director over Time

This figure shows excess pay of executive directors in FTSE All-Share companies (and its submarkets) in our sample from 2003 to 2018. Excess pay is estimated by regression analysis in Table 3, but replace the Time Trend variable with separate and individual year dummy variables. The regression coefficient of each year dummy variable is plotted in the figure. Total pay is total direct compensation plus total equity linked compensation. Salary pay is base annual pay. Bonus pay is an annual payment made in addition to salary. Equity-linked pay is the sum of shares awarded, estimated value of options awarded, and long-term incentive plans (LTIPs) awarded.

FIGURE 3
Remuneration Policy around the 2013 Say-on-Pay Regulation

This figure shows statistics regarding the remuneration policy section for 28 FTSE 100 companies that have survived the period of 2011-2018, three years before and after the most recent regulation taking effect. The length of annual report is the page number of the annual report. The number of criteria and that of benchmarks refer to the conditions set for rewards. Bonus pay is an annual payment made in addition to salary. Long-term incentive pay is long-term incentive plans (LTIPs).

FIGURE 4
Recent Shareholder Dissent at Listed Companies

This figure shows the number of dissent cases at listed companies that have encountered shareholder opposition of 20% or more to a resolution (written statements by a company's board of directors detailing a binding corporate action), or any resolution withdrawn before a shareholder vote during the period of January 2017 to 17 December 2019 (the most recent update). The dissent category "Remuneration - other" includes resolutions to approve the directors' remuneration policy, resolutions for share scheme approval, or other remuneration resolutions. The dissent category "Other resolutions" includes resolutions on the following matters: independent shareholder vote on independent directors, authority to allot shares, disapplication of pre-emption rights, rule 9 waiver, auditor re-election & remuneration, political donations, requisitioned resolutions, or other resolutions. The dissent category "Withdrawn resolution" refers to resolutions withdrawn before a shareholder vote.

APPENDIX 1: Model

We employ the ordinary least squares (OLS) regression analysis to test our hypotheses. OLS is a method for estimating the unknown parameters in a linear regression model which minimizes the differences between the observed data and the predicted values from the linear approximation of the data. A simple regression model has the following specification, $y_i = \alpha + \beta x_i + \varepsilon_i$. This model could be used for instances when one dependent variable Y is affected by the independent (or explanatory) variable X. Both X and Y are observable. β is the estimated coefficient (or slope) of X and captures the extent of the change in Y in response to the change in X. α is the estimated constant (or intercept) that constitutes Y and is unaffected by X. ε is the error term (or disturbance) that captures the aforementioned differences between the real data and the predicted values.

We estimate the impact of “say on pay” regulations through the following two model specifications using OLS estimation:

$$\begin{aligned} \text{Remuneration} = & \beta_0 + \beta_1 * (\text{Time Trend}) \\ & + \sum \beta_i (\text{Firm-Specific Control Variables}) + \varepsilon \dots \dots \dots (1) \end{aligned}$$

$$\begin{aligned} \text{Remuneration} = & \beta_0 + \beta_1 * (\text{Time Trend}) + \sum \beta_j * (\text{Period Dummy Variables}) \\ & + \sum \beta_i (\text{Firm-Specific Control Variables}) + \varepsilon \dots \dots \dots (2) \end{aligned}$$

Our main dependent variable includes various remuneration measures: total pay, salary, bonus and equity-linked remuneration. Specifically, salary refers to base annual pay and bonus refers to an annual payment made in addition to salary. Equity-linked remuneration refers to the sum of shares awarded, estimated value of options awarded and long-term incentive plans (LTIPs) awarded in the selected period. Total pay is defined as the total direct remuneration plus total equity linked remuneration for the period.

Our regression analysis contains a set of control variables to capture economic determinants of remuneration. Following related literature such as as Conyon and Sadler¹ and Ferri and Maber,² we control for firm size, measured by the previous year’s sales; firm profitability, measured by the previous year’s return on assets; shareholder return, measured by the previous year’s return on equity; growth opportunity, measured by the previous year’s market-to-book ratio; board size, calculated as the number of directors; portion of NED,

¹ Conyon and Sadler, supra n 6.

² See for instance, Ferri and Maber, supra n 6 for a detailed discussion regarding the literature on executive pay.

calculated as the portion of non-executive directors in the board; CEO, an indicator variable equal to one if the director's role includes chief executive officer, and zero otherwise; and tenure, measured by the number of years serviced in the firm and the director's age. These control variables, where applicable, are transformed by either natural logarithm or winsorization for regression analysis.³ In addition, we include industry/sector fixed effects, while standard errors are clustered on the firm identifier across all regressions.⁴

Model (1) is the baseline specification, showing how the main dependent variable of remuneration measures is affected by the set of control variables as well as the time trend.⁵ The error term ε is the value that is not explained by the economic determinants included in the model and therefore is considered excess pay. To examine whether "say on pay" regulations are effective, we add two indicator variables, V1 and V2, to Model (1) and test whether they explain or are correlated with the error term, as Model (2). V1 is equal to 1 for observations occurring since August 2003, and 0 otherwise. V2 is equal to 1 for observations occurring since October 2014, and 0 otherwise. Each variable captures the change in the average pay afterwards (or the mean difference before and after the regulation in question). Having two variables together would capture the difference in the excess level of the remuneration under study between each period and its previous period – the incremental or marginal effect of each regulation.

³ Detailed definitions are provided in Appendix 2, Table 1.

⁴ The fixed effects are based on BoardEx industry/sector code.

⁵ Time trend is defined as the fiscal year minus 1999.

APPENDIX 2: Additional results

TABLE 1
Variable Definitions

Variable	Definition	Data source (data item name, if applicable)
(1) Ln(Total Pay)	The natural logarithm of total pay (total direct compensation plus total equity linked compensation)	BoardEx (Total Compensation)
(2) Ln(Salary)	The natural logarithm of salary (base annual pay)	BoardEx (Salary)
(3) Ln(Bonus)	The natural logarithm of bonus (an annual payment made in addition to salary)	BoardEx (Bonus)
(4) Ln(Equity Linked Pay)	The natural logarithm of equity-linked pay (the sum of shares awarded, estimated value of options awarded, and LTIPs awarded)	BoardEx (Equity Linked)
(5) Salary/Total Pay	The ratio of salary over total pay	BoardEx
(6) Bonus/Total Pay	The ratio of bonus of total pay	BoardEx
(7) Equity/Total Pay	The ratio of equity-linked pay over total pay	BoardEx
(8) Firm Size	The natural logarithm of sales, winsorized at the 5% level	Datastream (WC01001)
(9) Growth Opportunity	Market value to book ratio, winsorized at the 5% level	Datastream (MTBV)
(10) ROE	Return on equity, winsorized at the 5% level	Datastream (WC08801)
(11) ROA	Return on assets, winsorized at the 5% level	Datastream (WC08326)
(12) CEO	An indicator variable that takes the value of one if the executive director is CEO, and zero otherwise	BoardEx (Director Role)
(13) Tenure	The natural logarithm of years of directorship since year 1999	BoardEx
(14) Age	The natural logarithm of age of the executive director	BoardEx (Age)
(15) Board Size	The natural logarithm of size of board of directors	BoardEx
(16) Portion of NED	Proportion of non-executive directors	BoardEx (ED/SD)

TABLE 2
Descriptive Statistics 1999-2018

	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) Ln(Total Pay)	6.61	1.06	1.00															
(2) Ln(Salary)	5.62	0.73	0.78	1.00														
(3) Ln(Bonus)	4.18	2.28	0.57	0.37	1.00													
(4) Ln(Equity Linked Pay)	4.62	2.76	0.74	0.43	0.35	1.00												
(5) Salary/Total Pay	0.45	0.26	-0.77	-0.30	-0.63	-0.80	1.00											
(6) Bonus/Total Pay	0.20	0.17	0.16	0.04	0.70	-0.18	-0.32	1.00										
(7) Equity/Total Pay	0.35	0.26	0.66	0.27	0.16	0.91	-0.79	-0.34	1.00									
(8) Firm Size	13.00	1.65	0.43	0.41	0.22	0.34	-0.28	0.01	0.27	1.00								
(9) Growth Opportunity	2.71	2.27	0.08	0.07	0.03	0.07	-0.05	-0.03	0.07	0.12	1.00							
(10) ROE	0.16	0.38	0.00	-0.04	0.11	-0.01	-0.05	0.11	-0.02	-0.04	-0.05	1.00						
(11) ROA	0.07	0.08	0.01	0.01	0.05	-0.02	-0.01	0.07	-0.03	0.16	0.22	0.19	1.00					
(12) CEO	0.28	0.45	0.31	0.35	0.14	0.17	-0.12	0.02	0.11	0.04	0.02	-0.01	-0.01	1.00				
(13) Tenure	5.25	3.90	0.26	0.32	0.11	0.12	-0.08	0.03	0.06	0.01	-0.03	0.03	0.06	0.17	1.00			
(14) Age	51.05	7.12	0.11	0.21	0.02	-0.05	0.07	0.00	-0.08	0.08	-0.03	0.00	-0.01	0.11	0.34	1.00		
(15) Board Size	9.39	2.86	0.27	0.18	0.18	0.19	-0.23	0.11	0.15	0.31	0.03	-0.04	-0.03	-0.11	-0.06	0.07	1.00	
(16) Portion of NED	0.57	0.14	0.46	0.40	0.22	0.37	-0.33	0.00	0.33	0.25	0.02	-0.05	-0.07	0.24	0.12	0.04	-0.01	1.00

	Mean	V0 (01/1999-)	V1 (08/2003-)	V2 (10/2014-)
(1) Ln(Total Pay)		5.93	6.69	7.06
(2) Ln(Salary)		5.24	5.65	5.93
(3) Ln(Bonus)		3.42	4.32	4.58
(4) Ln(Equity Linked Pay)		3.36	4.82	5.30
(5) Salary/Total Pay		0.57	0.43	0.38
(6) Bonus/Total Pay		0.18	0.20	0.21
(7) Equity/Total Pay		0.25	0.37	0.41
(8) Firm Size		12.86	12.98	13.20
(9) Growth Opportunity		2.83	2.58	2.91
(10) ROE		0.14	0.17	0.15
(11) ROA		0.07	0.07	0.07
(12) CEO		0.19	0.28	0.37
(13) Tenure		2.30	5.68	6.97

(14)	Age	50.39	50.66	52.72
(15)	Board Size	9.96	9.41	8.80
(16)	Portion of NED	0.47	0.57	0.66

The table shows descriptive statistics. It contains a sample of UK FTSE All-Share companies from 1999 to 2018. Ln(Total Pay) is the natural logarithm of total pay (total direct compensation plus total equity linked compensation); Ln(Salary) is the natural logarithm of salary (base annual pay); Ln(Bonus) is the natural logarithm of bonus (an annual payment made in addition to salary); Ln(Equity Linked Pay) is the natural logarithm of equity-linked pay (the sum of shares awarded, estimated value of options awarded, and long-term incentive plans awarded); Salary/Total Pay is the ratio of salary over total pay; Bonus/Total Pay is the ratio of bonus of total pay; Equity/Total Pay is the ratio of equity-linked pay over total pay; Firm Size is the natural logarithm of sales, winsorized at the 5% level; Growth Opportunity is market value to book ratio, winsorized at the 5% level; ROE is return on equity, winsorized at the 5% level; ROA is return on assets, winsorized at the 5% level; CEO is an indicator variable that takes the value of one if the executive director is CEO, and zero otherwise; Tenure is the natural logarithm of years of directorship since year 1999; Age is the natural logarithm of age of the executive director; Board Size is the natural logarithm of size of board of directors; Portion of NED is proportion of non-executive directors.

TABLE 3
Additional Analysis over Sub-Markets

Panel A: Descriptive statistics					
	Mean	FTSE 100	FTSE 250	FTSE SMALL	FTSE AIM
(1) Ln(Total Pay)		7.29	6.55	5.08	6.08
(2) Ln(Salary)		6.03	5.55	4.65	5.35
(3) Ln(Bonus)		4.96	4.25	1.58	3.40
(4) Ln(Equity Linked Pay)		5.90	4.57	1.45	3.54
(5) Salary/Total Pay		0.34	0.44	0.76	0.55
(6) Bonus/Total Pay		0.20	0.21	0.10	0.18
(7) Equity/Total Pay		0.46	0.35	0.14	0.27
(8) Firm Size		14.20	12.85	8.70	12.15
(9) Growth Opportunity		3.05	2.74	2.28	2.35
(10) ROE		0.14	0.17	0.09	0.15
(11) ROA		0.07	0.07	-0.07	0.05
(12) CEO		0.27	0.28	0.30	0.29
(13) Tenure		4.90	5.47	5.23	5.24
(14) Age		51.88	50.79	51.09	50.67
(15) Board Size		11.41	9.13	5.94	7.97
(16) Portion of NED		0.61	0.56	0.47	0.54

Panel B: CEO pay					
	Total Pay	Total Pay	Total Pay	Total Pay	
	FTSE 100	FTSE 250	FTSE SMALL	FTSE AIM	
Time Trend (t)	0.056*** (6.91)	0.057*** (7.80)	0.030*** (3.54)	0.031*** (4.85)	
V1 (08/2003-)	0.142 (1.62)	0.148** (2.16)	0.165* (1.93)	-0.057 (-0.63)	
V2 (10/2014-)	-0.298*** (-5.54)	-0.221*** (-4.03)	-0.016 (-0.24)	-0.012 (-0.27)	
Constant	3.283** (2.26)	4.520*** (4.78)	2.411** (2.23)	3.260*** (4.89)	
R ²	0.592	0.413	0.411	0.254	
Industry FE & controls	Yes	Yes	Yes	Yes	
Observations	1273	2080	1510	4337	

Panel C: Non-executive director pay					
	Total Pay	Total Pay	Total Pay	Total Pay	
	FTSE 100	FTSE 250	FTSE SMALL	FTSE AIM	
Time Trend (t)	0.052*** (11.44)	0.034*** (10.26)	0.031*** (9.35)	0.023*** (6.22)	
V1 (08/2003-)	0.041 (1.17)	0.021 (0.70)	0.034 (1.12)	-0.023 (-0.40)	
V2 (10/2014-)	-0.087*** (-2.93)	0.006 (0.30)	0.043* (1.71)	0.049* (1.84)	
Constant	1.590** (2.36)	1.470*** (4.25)	1.777*** (4.67)	2.586*** (9.53)	
R ²	0.606	0.585	0.551	0.236	
Industry FE & controls	Yes	Yes	Yes	Yes	
Observations	9281	14160	12151	14803	

The table shows additional analysis by sub-markets that contain UK FTSE All-Share and FTSE AIM (Alternative Investment Market) companies from 1999 to 2018. Panel A shows descriptive statistics. Ln(Total Pay) is the natural logarithm of total pay (total direct compensation plus total equity linked compensation); Ln(Salary) is the natural logarithm of salary (base annual pay); Ln(Bonus) is the natural logarithm of bonus (an annual payment made in addition to salary); Ln(Equity Linked Pay) is

the natural logarithm of equity-linked pay (the sum of shares awarded, estimated value of options awarded, and long-term incentive plans awarded); Salary/Total Pay is the ratio of salary over total pay; Bonus/Total Pay is the ratio of bonus of total pay; Equity/Total Pay is the ratio of equity-linked pay over total pay; Firm Size is the natural logarithm of sales, winsorized at the 5% level; Growth Opportunity is market value to book ratio, winsorized at the 5% level; ROE is return on equity, winsorized at the 5% level; ROA is return on assets, winsorized at the 5% level; CEO is an indicator variable that takes the value of one if the executive director is CEO, and zero otherwise; Tenure is the natural logarithm of years of directorship since year 1999; Age is the natural logarithm of age of the executive director; Board Size is the natural logarithm of size of board of directors; Portion of NED is proportion of non-executive directors. For Panels B and D, the dependent variable is Total Pay: the natural logarithm of total pay (total direct compensation plus total equity linked compensation). Time Trend is defined as the fiscal year minus 1999. V1 (V2) is an indicator variable that takes the value of one if the annual report date is after July 2003 (September 2014), and zero otherwise. Control variables (not reported) include the following: Firm Size, Growth Opportunity, ROE, ROA, Tenure, Age, Board Size, and Portion of NED. T-statistics are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Industry fixed effects are included and standard errors are clustered on the firm identifier.

TABLE4
Performance-linked Remuneration of FTSE All-Share Firms

	Equity- Linked	Equity- Linked	Cash-based V0 (01/1999-)	Cash-based V1 (08/2003-)	Cash-based V2 (10/2014-)
Time Trend (t)	0.054*** (4.46)	0.051*** (3.19)	-0.080*** (-4.04)	0.022*** (4.84)	0.023** (2.49)
V1 (08/2003-)		0.481*** (3.70)			
V2 (10/2014-)		-0.310** (-2.49)			
Industry-adjusted ROE (t-1): +			0.081 (0.71)	-0.078 (-1.29)	-0.099 (-1.38)
Industry-adjusted ROE (t-1): -			0.134 (1.05)	0.218*** (3.10)	0.585*** (5.27)
Industry ROE (t-1)			-0.023 (-0.24)	0.208*** (3.57)	0.269*** (2.87)
Industry-adjusted ROA (t-1): +			0.493 (0.99)	0.377 (1.11)	-0.203 (-0.57)
Industry-adjusted ROA (t-1): -			-0.985** (-2.51)	-0.442 (-1.35)	-0.571 (-1.15)
Industry ROA (t-1)			1.437 (1.61)	0.939* (1.74)	1.652** (2.19)
Controls:					
Firm Size (t-1)	0.368*** (5.06)	0.368*** (5.04)	0.231*** (9.54)	0.142*** (5.15)	0.099*** (3.87)
Growth Opportunity (t-1)	0.070** (2.56)	0.076*** (2.77)	0.010 (0.79)	0.016* (1.79)	0.017* (1.78)
CEO (t)	0.643*** (11.97)	0.658*** (12.32)	0.456*** (15.63)	0.451*** (20.42)	0.450*** (17.96)
Tenure (t)	0.364*** (6.32)	0.282*** (4.80)	0.490*** (10.97)	0.256*** (13.32)	0.180*** (8.59)
Age (t)	-2.633*** (-8.08)	-2.419*** (-7.44)	0.217* (1.70)	0.095 (0.76)	0.118 (0.84)
Board Size (t)	1.594*** (4.69)	1.595*** (4.70)	0.275** (2.29)	0.511*** (4.44)	0.760*** (7.70)
Portion of NED (t)	4.222*** (7.11)	4.144*** (6.86)	0.630*** (3.03)	1.109*** (5.68)	1.068*** (5.08)
ROE (t-1)	0.209*** (2.65)	0.195** (2.48)			
ROA (t-1)	-1.797*** (-2.69)	-1.780*** (-2.70)			
Constant	2.958** (1.99)	1.976 (1.32)	0.465 (0.78)	1.458*** (2.73)	1.822*** (2.95)
R^2	0.297	0.302	0.455	0.404	0.412
Industry FE	Yes	Yes	Yes	Yes	Yes
Observations	17427	17427	3675	9984	3768

The table shows the determinants of executive director cash pay over three regulatory regime periods. It contains a sample of UK FTSE All-Share companies from 1999 to 2018. The dependent variable is total direct compensation: the natural logarithm of sum of all cash-based compensation. Time Trend is defined as the fiscal year minus 1999 for V0, 2003 for V1, 2014 for V2. Industry-adjusted ROE + (-) is the difference between ROE and Industry ROE if positive (negative), and 0 otherwise. Industry ROE is mean ROE for all firms in the same BoardEx industry code each year. Industry-adjusted ROA + (-) is the difference between ROA and Industry ROA if positive (negative), and 0 otherwise.

Industry ROA is mean ROA for all firms in the same BoardEx industry code each year. Firm Size is the natural logarithm of sales; Growth Opportunity is market value to book ratio; CEO is an indicator variable that takes the value of one if the executive director is CEO, and zero otherwise; Tenure is the natural logarithm of years of directorship since year 1999; Age is the natural logarithm of age of the executive director; Board Size is the natural logarithm of size of board of directors; Portion of NED is proportion of non-executive directors; ROE is return on equity; ROA is return on assets. Firm Size, Growth Opportunity, ROE and ROA related variables are winsorized at the 5% level. T-statistics are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Industry fixed effects are included and standard errors are clustered on the firm identifier.