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Introduction

Thank you for considering this submission. I am a Professor of Finance and Academic Director of the Centre for Corporate Governance at London Business School, who specialises in corporate governance, executive pay, and purposeful business. I have published on these topics in all the top academic finance journals, have written about them in the *Harvard Business Review*, *Financial Times*, *Wall Street Journal*, and *World Economic Forum*, and advise many companies and investors on executive pay as well as speaking on this topic at several practitioner and policy conferences. I gave both written and oral evidence to the BEIS Select Committee’s Inquiry on Corporate Governance and am very grateful to the committee for considering my views.

I also serve on the Steering Group of The Purposeful Company (TPC). Via TPC’s submissions, I am already inputting my views to the first three questions in the inquiry:

- What progress has been made on implementing the recommendations on executive pay by the previous Committee in its 2017 report on Corporate Governance?
- What improvements have been made to reporting on executive pay in the last 12 months?
- What steps have been taken by Remuneration Committees and institutional investors to combat excessive executive pay in the last 12 months?

Therefore, this submission will focus on the fourth question, “What further measures should be considered?” The first questions are on *positive* issues – what *does* happen – for which practitioners are particularly well-placed to answer. I thought a separate submission on the fourth question might be helpful since it is on a *normative* issue – what *should* happen. Academic research is especially well-suited to answer normative questions, since it can identify causation (not just correlation) and thus diagnose the effects of current practices and thus whether current practices should be kept, extended, or lessened. If a move away from current practices is warranted, academic research can also help guide us on potential alternatives. Two types of research are valuable in this:

- *Empirical research*. Some potential improvements have been implemented extensively in other countries and so we have real-world evidence of their effects. Many people propose improvements to executive pay, but these proposals are often based on hunches. By basing improvements on empirical research, we can ensure that they are tried-and-tested. Most evidence that we have on executive pay is from the US. While we cannot immediately assume that results from the US are immediately translatable into the UK, and so we should not follow these findings blindly, they do offer useful guidance, in particular since the US and the UK’s

economic systems have many similarities. (As an analogy, we learn from medical studies conducted in the US, even though it has a quite different medical system and ethnic mix.)

- *Theoretical research.* Some potential improvements have not been implemented in any country. Theoretical models can study questions for which there is no data, because they are investigating an as-yet-untried idea. The adjective “theoretical” does not mean “abstract”. A theoretical model is similar to a city simulator – it builds a realistic model of the economy, and then studies what happens if a variable is changed. Most Nobel Prizes in economics have been awarded for theoretical work, including the prize given to Bengt Holmstrom in 2016, in part for his work on optimal pay schemes.

Evidence should not be used dogmatically – we should be guided by evidence, not blindly follow it. Moreover, it is *crucial* to focus on the highest-quality academic research, published in the most stringent peer-reviewed journals. There is a huge range in quality of academic research – many empirical papers fail to distinguish correlation from causation or to control for other variables; many theoretical papers make unrealistic assumptions and so have little value. It is almost always possible to find “evidence” that supports what one would like to show, ignoring the quality of the journal in which it was published, or whether it has even been published. The peer review process at the very top journals is critical to ensure the integrity of research. At the *Review of Finance* (the #1 finance journal in Europe, for which I serve as Managing Editor). I reject 97% of papers; lower-ranked journals have substantially laxer standards. Many papers remain unpublished after several years because they have constantly failed peer review; others completely overturn their conclusion after going through peer review and correcting their mistakes. Almost all the papers I cite here are published in the most rigorous journals.

The desire to use research published in the highest-quality journals is not an issue of academic snobbery or elitism. It is based on the desire to have the very best guidance for these issues of national importance – just as health policy should be based on the very best medical research. I was disappointed that the final BEIS report on the Corporate Governance Inquiry contained reference to “evidence” which the committee later learned to be false over the course of the inquiry – because it was based on a half-finished working draft when the final published version showed completely the opposite result. This shows how peer review can dramatically change conclusions and is not simply a rubber stamp.

I have heard concerns that academic research is of little value for policy because academics do not agree on anything – perhaps 10 say A on an issue, and another 10 say B. This is not true. There is much greater consensus (although still not unanimity) when looking at the highest-quality research. Again, the medical analogy is helpful – there are differing views on whether vaccination causes autism, whether processed meat is harmful etc., but there is a general consensus on these issues; in a trial, there is evidence on both sides but the jury can still reach a conclusion. Public trust in business is certainly very low, but trust in news, evidence, and expertise is also low (e.g. the unverified claim that Brexit would allow the UK to spend £350m per week on the NHS). This trust may be further eroded by using

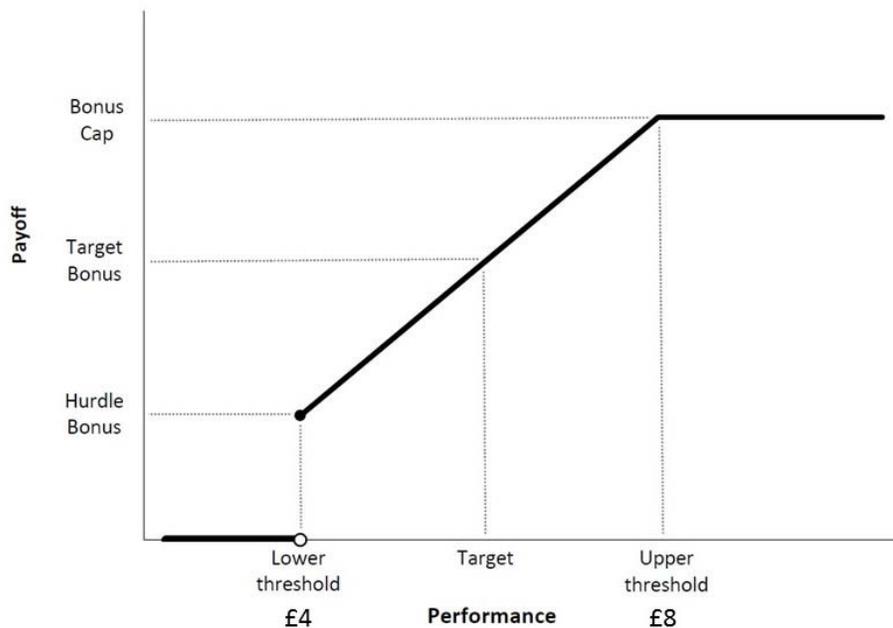
unreliable evidence because the findings are palatable, and downplaying “inconvenient truths”. The use of unreliable evidence is a serious matter – not purely a matter of “academic” debate – just as we have recently seen trust in the judicial system eroded by the use of unreliable evidence in criminal trials.

I now turn to the question “What further measures should be considered?”

1. Encouragement of the use of restricted stock, rather than LTIPs, as “best practice”

Currently, the almost universal practice is to pay with Long-Term Incentive Plans (“LTIPs”). Despite the name, LTIPs lead to short-term behaviour. Instead, I advocate replacing them with restricted stock – stock that the CEO cannot sell for (say) 5-7 years. Giving executives restricted stock means that they are paid like owners. They will thus act and think like owners, rather than hired outsiders who aim to maximise their bonus.

An LTIP works as follows. It pays the executive according to multiple performance measures – for example, stock price, profitability, and sales growth – at the end of an evaluation period (say 3 years). For each measure, there’s a lower threshold (say a stock price of £4) that the executive must beat for the LTIP to pay off. The value of the LTIP rises with further increases above £4, before maxing out at a higher threshold (say £8).



The philosophy behind LTIPs is sound, which is to link pay to performance. However, it does so in an unnecessarily complex way, that allows for gaming and fudging.

Gaming. “Long-term” incentive plans provide substantial incentives to engage in short-termism as the end of the evaluation period approaches. If the stock price is just below £4, the CEO may cut R&D to boost earnings and inflate the short-term stock price over the hurdle. The CEO might also gamble. If the gamble fails, the stock price falls to £3, but the LTIP would not have paid off anyway, so the downside is limited. If the gamble succeeds, the stock price rises to £5, and the CEO cashes in. Effectively, the LTIP gives a one-way bet.

The problems are not limited to the bottom end. If the stock price is just above £8, there is no further upside. Rather than innovating, the executive may coast and be excessively conservative. Bennett, Bettis, Gopalan, and Milbourn (2017) find that performance-contingent bonuses lead to CEOs taking short-term actions to meet the goals (cutting R&D and increasing accruals), as well as performing just well enough to meet the goal but going no further to avoid ratcheting up future goals.

These thresholds do not make sense. Society loses if firm performance is disastrous (£3) rather than bad (£4). And society gains if firm performance is great (£9) rather than good (£8). But, for the LTIP, there is no difference between disastrous and bad, or between great and good. Indeed, the theory models of Holmstrom and Milgrom (1987) and Edmans and Gabaix (2011) show that optimal compensation schemes should be smooth, i.e. not exhibit such discontinuities. I am not aware of *any* theory model which shows that the optimal scheme should look like the above diagram.

Fudging. There is substantial ambiguity on how to design the LTIP.

1. *What performance metrics should be used?* For example, should profitability be measured by EBITDA, EBIT, or Net Income? Should adjustments be made (e.g. BP uses “underlying replacement cost profit”)? Should we measure raw profits, or profits scaled by either Sales, Assets, or Equity? Should there be non-financial measures, e.g. treatment of workers? If so, any measure will be incomplete, and encourage focus only on the measure being rewarded. For example, measuring worker pay will not capture working conditions.
2. *How do we weight the measures?* Should it be 52% on the stock price, 27% on profitability, and 21% on sales growth? In 2015, BP CEO Bob Dudley (who was paid according to LTIPs) received £14m, despite the stock price falling 15%, due to heavy weighting on the safety and profit targets. Morse, Nanda, and Seru (2011) find that the weightings sometimes change after the fact, to overweight the dimension that the executive performs best on.
3. *How do we choose the thresholds?* It is very difficult to assess whether the thresholds should be £4, £8 or anything else. In practice, the lower threshold is often easy to hit, leading to perceptions of unfairness – why should executives get a bonus for average performance, when ordinary workers do not? Moreover, the thresholds are sometimes lowered if there’s a bad external shock (in BP’s case, an oil price decline) – but not increased upon good luck – again

leading to a one-way bet. On the other hand, if the lower threshold is too high, the executive is unlikely to meet it, and so it has little incentive effect.

Restricted stock has three major advantages over LTIPs:

1. *Simplicity*. Restricted stock is simple. The board does not need to choose particular measures, weightings, or thresholds, and so the CEO does not divert attention to gaming the system. (Sometimes restricted stock may come with an underpin so that the stock is forfeited upon clear failure, in which case only the underpin needs to be decided). Restricted stock is simpler than the alternative of giving executives cash and making them buy shares (even though it reaches the same outcome) as CEOs can game when they buy the shares. For example, they can release bad news to depress the stock price before buying shares. (See Edmans, Goncalves-Pinto, Groen-Xu, and Wang (2018) for evidence that CEOs release good news to inflate the stock price just before selling shares). Moreover, if the CEO buys shares on the open market, there would be no restrictions on selling them.
2. *Transparency*. It is very difficult to value an LTIP when it is awarded. (The award date, rather than the payout date, is the relevant date since this is when the firm has committed itself to a future payment). In contrast, the value of stock is unambiguous. We know how much the CEO gets paid. Society also knows the criteria under which she will get paid – the long-term stock price.
3. *Long-Termism*. Restricted stock leads to sustainable performance. There is significant evidence that, while the short-term stock price can be manipulated, the long-run stock price captures stakeholder value as well as shareholder value – see Edmans (2016) for a survey of this evidence. Flammer and Bansal (2017) show that granting long-term equity has a positive causal effect on future profitability, innovation, and CSR (in particular, employee well-being). Edmans, Fang, and Lewellen (2017) find that CEOs significantly cut investment when their equity is about to vest, i.e. their equity is about to vest. The theory model of Edmans, Gabaix, Sadzik, and Sannikov (2012) shows that long-term equity grants deter short-term actions.

A very important advantage of restricted stock is that they can be given to all employees as well. This will help address fairness concerns. Broad-based equity schemes mean that, if the firm succeeds, employees benefit, not just executives. Executives cannot gain without employees gaining also. In contrast, if CEOs get LTIPs and workers get shares, the LTIP might pay off even if the stock price falls (as was the case for Bob Dudley), leading to concerns of “one rule for them, another rule for us”. Indeed, Hochberg and Lindsey (2010) show that broad-based equity plans improve performance.

I applaud the BEIS Corporate Governance Inquiry report for recommending restricted stock over LTIPs. It was disappointing that the government’s response to the Green Paper advocated sticking with the

status quo – a status quo which favours complexity, opacity, and short-termism over simplicity, transparency, and long-termism. The BEIS report advocated a universal scrapping of LTIPs. While I believe there are many concerns with LTIPs, I would caution against a universal scrapping, as optimal pay schemes are not one-size-fits-all – they are situation-specific, and must take into account a company’s particular circumstances. In some firms, LTIPs can be effective. A good solution might be a “comply-or-explain” principle in the Corporate Governance Code advocating that the bulk of executive remuneration be in the form of restricted stock, but leaving firms the option to use different schemes if they explain why.

Note that restricted stock was also recommended by the Norwegian Sovereign Wealth Fund’s “Remuneration of the CEO” principles, released in April 2017, and has just been voted through at the Weir Group with over 92% support (including positive recommendations by both ISS and Glass Lewis).

The following are answers to some potential concerns that I have heard practitioners raise about restricted stock.

Q1: Will this lead to CEOs focusing entirely on shareholders and ignoring other stakeholders?

A1: This is unlikely. There is indeed a trade-off between shareholders and stakeholders in the short-term, but not the long-term. CEOs can cut wages to increase shareholder value at the expense of workers, but in the long-term this erodes shareholder value, as workers leave. As mentioned above, Edmans (2016) summarises the evidence that purposeful behaviour – serving customers, employees, the environment, and society – boosts the long-term stock price. See also p26-33 of The Purposeful Company Interim Report.

Q2: Even the long-term stock price depends on factors outside the CEO’s control, e.g. stock market upswings, leading to “windfalls”?

A2: Investors and stakeholders also benefit from general stock market upswings, so this is fair. Moreover, the executive also suffer losses from stock market downturns outside her control, sharing the losses alongside ordinary people who have invested for retirement. If the executive were instead given no incentives and a straight cash salary, she would likely invest most of it in the stock market. It is much better if she invests it in her own firm, whose value is partly under her control, than other firms whose value is almost entirely out of her control.

Q3: Will this just lead to greed? CEOs just work hard only because it makes them rich – should we not want a CEO to be intrinsically motivated?

A3: It is certainly critical for CEOs to be intrinsically passionate about their firm's mission. They should want to work hard to make products that transform customers' lives for the better, to provide employees with a healthy and enriching place to work, and to preserve the environment for future generations – not to enrich themselves. If the CEO is not intrinsically motivated, a firm has the wrong CEO. The CEO should be fired, rather than given incentives so that extrinsic motivation compensates for her lack of intrinsic motivation.

However, despite the importance of intrinsic motivation, there is evidence that extrinsic motivation works for executives, because there is a relatively comprehensive measure of performance – the long-run stock price. (There is indeed evidence that incentives can backfire in other settings, e.g. for teachers and doctors, because there is no comprehensive measure of performance). In particular, von Lilienfeld-Toal and Ruenzi (2014) find that CEOs with high equity incentives outperform CEOs with low equity incentives by 4-10% per year, and the researchers do further tests to suggest that the results are causation rather than correlation. Intrinsic motivation, and reputational concerns, will almost certainly be sufficient to motivate CEOs to ensure their firm continues to survive, and even thrive. But, they may not be enough to incentivise CEOs to take risks and move the firm from good to great.

In addition, incentives lead to accountability. If a CEO underperforms and the stock price falls, investors (including savers and pensioners) lose their wealth, and many employees may lose their job. A CEO who does not own stock will suffer little punishment. Instead, stock-based pay can lead to significant punishment – in the US, a 10% fall in the stock price leads to a CEO losing \$5 million of wealth.

Q4: With LTIP, it is clear what the executive should do to get paid – hit a profit target of £4, or a sales growth target of 5%. The long-term stock price is so far off that the CEO doesn't know what to do to hit it.

A4: This is true – and is precisely the point. It is clear how to hit short-term targets, which is why they encourage manipulation (e.g. cutting R&D). It is much harder to improve the long-term stock price in *instrumental* ways. The CEO does so by focusing *intrinsically* on creating value for society – on growing the pie. Doing so improves the long-term stock price as a by-product. Removing targets frees the CEO from trying to hit them – and instead frees her to create value. Given the evidence that creating value for society ultimately improves the long-term stock price, she can be free to focus on value creation knowing that she will be rewarded after the fact, even though such rewards were not the motive to create value.

Q5: Targets help tie the CEO's pay to performance. If we removed the thresholds, the CEO would receive her shares regardless of performance. You would effectively be giving the CEO free shares.

Without targets, the *number* of CEO shares will not depend on performance, but their *value* depends substantially – see the \$5 million figure above. I have heard some equity investors express the concern that giving the CEO equity as well as a salary is giving her “fixed on fixed”. This makes no sense. The value of equity is absolutely not fixed - it depends substantially on performance. Indeed, the same equity investors would likely object to being classified as fixed income investors.

Creating an extra sudden drop if the CEO misses a threshold simply gives short-term incentives to hit the threshold. If the incentives provided by straight equity are deemed sufficient, they can be made more performance-sensitive as shown by Edmans and Gabaix (2011) – for example, by giving the CEO levered equity. Crucially, unlike LTIPs, levered equity provides the CEO with stronger incentives everywhere, not just to get the stock price up from just below £4 to just above £4.

Moreover, since there is no risk of forfeiture, CEOs will be willing to accept fewer shares if targets are removed. Indeed, practitioners suggest that CEOs might accept a discount of around 40%.

It is not at all the case that the CEO is given free shares. The shares are accompanied by a reduction in her salary. For example, rather than being given a £2 million salary, she might be given a £500,000 salary and £1.5 million of shares. Again, this would be similar to giving her £2 million and making her buy £1.5 million of shares, but with the critical difference of removing gaming in the timing of the purchases, and being able to restrict the sale of shares for 5-7 years. Allowing the CEO to buy shares on the open market will most likely backfire since she can sell them at any point and thus has a much shorter horizon.

2. Encouragement of the use of debt-based pay, where appropriate

The financial crisis saw CEOs undertake risky actions that cost billions of pounds. Examples included irresponsible subprime lending and over-expansion through excessive leverage. Moreover, this problem extends beyond financial institutions to other corporations. For example, Punch Taverns accumulated £2.3bn of debt through an expansion spree before the financial crisis, which has long been threatening its viability.

CEOs have incentives to take excessive risk because they are paid primarily with equity and LTIPs. Their value rises if a risky project pays off, but cannot fall below zero if things go wrong – so the CEO has a one-way bet. Of course, executives are incentivised not only by their equity and LTIPs, but the threat of being fired and reputational concerns. However, the risk of being fired mainly depends on the incidence of bankruptcy and not the severity of bankruptcy. For example, assume that the CEO is fired upon any level of bankruptcy. Then, regardless of whether debtholders recover 90p per £1 (a mild bankruptcy) or 10p per £1 (a severe bankruptcy), the CEO will be fired and her equity will be worthless. Thus, if a firm is teetering towards liquidation, rather than optimally accepting a mild bankruptcy, the CEO may “gamble for resurrection”. If the gamble fails, the bankruptcy will be severe, costing debtholders (and society – including employees, customers, and suppliers) billions of pounds – but the CEO is no worse off than in a mild bankruptcy, so she might as well gamble.

One solution I have heard is to remove limited liability *for the firm*. I view this as a highly undesirable solution that would throw the baby out with the bathwater. Ordinary savers and pensioners would be unable to invest in equity, and thus share in the profits earned by companies. A much better solution is to effectively remove limited liability *for the CEO* by giving her extra penalties if the firm becomes bankrupt. Edmans and Liu (2011) show that this can be done by replacing some of the CEO’s salary with unsecured debt. The value of debt is eroded in bankruptcy – and the decline is greater the more severe the bankruptcy – and so she suffers from bankruptcy along with debtholders and society. As a result, the CEO internalises the costs to debtholders of undertaking risky actions. Just as restricted stock makes CEOs think like owners, restricted debt makes CEOs think like creditors, and so now take into account the risk of bankruptcy.

One may wonder why compensation committees - who are elected by shareholders – should care about debtholders. This is because if potential lenders expect the CEO to risk-shift, they will demand a high interest rate and covenants, ultimately costing shareholders.

Surprisingly, our paper finds that the optimal pay package does not involve giving the CEO the same debt-equity ratio as the firm. If the firm is financed with 60% equity and 40% debt, it may be best to give the CEO 80% equity and 20% debt. The optimal debt ratio for the CEO is usually lower than the firm’s, because equity is typically more effective at inducing effort. For firms in which risk-taking is likely to be good (e.g. tech firms where innovation is desirable), the optimal debt ratio may be close to

zero. Thus, unlike restricted stock, which I believe should be best practice, debt should be an additional tool to add to the arsenal rather than a universal feature. For levered firms (especially financial institutions), risk-taking is a greater concern and so debt may have a major role to play. Indeed, UBS and Credit Suisse have started to pay bonuses in the form of contingent convertible (CoCo) bonds. The former President of the Federal Reserve Bank of New York, William Dudley, proposed it to change the risk culture of banks, and current Executive Vice President Michael Held reiterated the idea in a speech on 25 April, 2018. In Europe, the November 2011 Liikanen Commission recommended bonuses to be partly based on “bail-inable” debt.

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Some of the papers I have summarised on my blog, Access To Finance (www.alexedmans.com/blog) which explains technical academic papers in plain English for a practitioner audience. Links are provided where available.

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