Corporate Governance Inquiry – Written Submission

Professor Alex Edmans, London Business School
www.alexedmans.com, aedmans@london.edu

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Approach

The following thoughts are grounded in rigorous academic research, which uses large scale datasets and, in many cases, demonstrates causation rather than mere correlation. Often views on pay are shaped by a couple of high-profile examples, but they may not be representative, in particular since the media has incentives to report the most egregious cases. It is almost always possible to find a hand-picked case study to support any point of view. Since any policy reform will apply to most (if not all) firms, it is important that it be based on large-scale research, rather than a couple of case studies.

Certainly, evidence should not be used dogmatically – it may not apply to the UK's specific setting, or a policy that has not worked in the past may still work if appropriately revised. However, it is still useful to be guided by evidence, even if we do not blindly follow it. Moreover, it is important to be critical of the evidence. In the current policy debate, many (well-intentioned) commentators have cited academic evidence which uses large-scale data yet turns out to be flawed. Such evidence is typically either unpublished and thus has not yet passed peer review, or published in a minor journal. Almost all academic papers I cite here are either published in the very top academic journals, or "revise-and-resubmits"[1] in them.

While most of the papers I cite are empirical, some are theoretical. The adjective "theoretical" does not mean "abstract". Instead, theoretical models can study questions for which there is no data (e.g. because they are investigating an as-yet-untried idea). A theoretical model is similar to a flight simulator – it builds a realistic model of the economy, and then studies what happens if a variable is changed.

Executive Summary

- Pay is certainly broken and should be reformed. However, reform should be on different dimensions to those currently proposed:
    - Extending the vesting periods of stock holdings, including beyond retirement
    - Granting long-term debt to deter excessive risk-taking
    - Removing short-term performance conditions on the vesting of equity
    - Disclosing the change in executive's wealth over the past year, not just salary and bonus. Often, poor performance substantially reduces the value of her shares – pay and performance are much more linked than currently perceived

[1] In top academic journals, 90-95% of papers get rejected. Only 5-10% get a "revise-and-resubmit" decision, which means that the Editor is giving the authors a chance to address his and the peer reviewers' concerns. Upon a "revise-and-resubmit", the probability of acceptance rises from 5-10% to 65-70%.

    - Disclosing several measures of a company's social responsibility, rather than only focusing on median worker pay
    - Disclosing the executive's *net* pay. Income tax is a superior way to address inequality than regulating executive pay, as it addresses high pay from all professions – executives of private firms, hedge funds, lawyers, sports, entertainment, trust fund beneficiaries
- The *level* of pay is not the most important dimension. In the average FTSE 100 firm, CEO pay is 0.06% of firm value. Much more important are the *sensitivity* of pay to performance and the *horizon* of pay (whether it is long-term or short-term). Their effects can run into several percentage points.
- The evidence suggests that
    - CEO wealth *is* closely tied to performance.
    - Equity incentives (particularly long-term incentives) have a positive causal effect on performance.
    - Worker representation on boards reduces firm value.
    - Say-on-pay reduces pay and ties it more closely with performance, suggesting that pay should be left to shareholders, not regulators. Binding say-on-pay is *less* effective than advisory say-on-pay.
    - The long-term stock price reflects stewardship of employees, customers, and the environment – not just shareholders. Thus, it is the best measure of performance.
- The ratio of CEO pay to median worker pay is misleading, since CEOs and workers compete in different markets. Disclosing this ratio can lead to myriad unintended consequences. Indeed, 80 years of pay regulation in the US has shown that regulation systematically backfires.
    - Just as we want to ensure that CEOs do not respond to short-term pressure to boost earnings, policy should be wary of responding to short-term pressure from the media. 80 years of evidence shows that passing a radical policy may win short-term approval, but be detrimental to society in the long-term.
- Forcing firms to put employees on boards sends the wrong message, as it suggests that workers and executives are in conflict, rather than in partnership – executives will only consult workers if forced. Instead, policymakers should highlight the evidence that employee well-being improves firm value, so that firms pursue it voluntarily. Indeed, many firms are voluntarily increasing worker pay.

<u>Detailed Comments</u>

I will focus on specific questions in your Terms of Reference rather than studying every question superficially.

1 *How are the interests of shareholders, current and former employees best balanced?*

1.1 The traditional view is that shareholders and employees are in conflict. They compete for a fixed pie; a dollar paid to workers is a dollar taken away from shareholders. However, the evidence does not support this.

1.2 Edmans (2011, 2012) shows that firms with high employee well-being beat their peers by 2-3%/year over a 28-year period – 89% to 184% cumulative. Moreover, it is likely employee well-being that causes performance, rather than the reverse.

1.3 However, it takes the stock market 4-5 years before it fully recognizes the benefits of employee well-being. Thus, to induce investment in employees, we must tie executive pay to the long-run stock price. Flammer and Bansal (2016) show that long-term incentives have a positive causal effect on long-run profitability, innovation (the number, quality, and novelty of patents), and corporate responsibility (particularly employee well-being).

1.4 Turning from the benefits of long-term incentives to the costs of short-term incentives, Edmans, Fang, and Lewellen (2016) show that vesting equity has a negative causal effect on investment. When equity vests, the CEO typically sells it (for diversification reasons). To ensure that she can sell at a high price, the CEO cuts R&D, cuts capital expenditure, and exactly meets or narrowly beats analysts' earnings targets – i.e. cuts investment to focus on earnings.

1.5 Evaluating the executive according to the long-run stock price is cleaner than using measures of stakeholder capital (Edmans (2016a)). The long-run stock price captures *all* channels through which the executive affects firm value – profits, growth opportunities, employees, customers, the environment etc., and weights them by their relative importance for firm value. In contrast, evaluating the executive according to gender diversity (as proposed by the CEO of Virgin Money), would not capture other forms of diversity, other forms of employee well-being, or other stakeholders. Even if directors used 10 measures of stakeholder stewardship, they will never be fully comprehensive; moreover, it is unclear how to weight these different measures.

2 *What factors have influenced the steep rise in executive pay over the past 30 years relative to salaries of more junior employees?*

2.1 That high CEO pay is a recent phenomenon seems to debunk arguments that it is due to talent, since it is unlikely that CEOs are more talented now than in the past. One interpretation is that the CEO has the board in her pocket, and can set her own pay.

2.2 Gabaix and Landier (2008) show that the rise in pay ratios can be fully justified as being efficient. This is one of the most influential finance papers of the millennium, and was cited as a major reason for Gabaix winning the Fischer Black award, for the person under 40 who has contributed most to finance (similar to the Fields Medal in maths).

2.3 Their argument is as follows. High pay is justified, not because CEOs have become more talented, but because talent has become more important. I use an analogy from football in no way to "dumb down" the argument, but to illustrate it most simply. Wayne Rooney is not more talented than Pele, but is paid far more because talent has become more important. Football is now a multi-billion dollar industry, due to TV advertising and a global marketplace. Even if Rooney is only slightly better than the next best striker, this can have a huge effect on Man United's profits, e.g. given the value of Champions League qualification.

2.4 Just as the football industry has got much bigger, so have firms. Firms also now compete in a global marketplace. Thus, it is worth paying top dollar for top talent. Average firm size in the FTSE 100 is £8b. Thus, contributes only 1% more to firm value than the next-best alternative, that is £80m – much higher than the £5m average salary.

2.5 The Gabaix-Landier hypothesis is not just an abstract theory, but can be tested. They show that the increase in pay between 1980 and 2003 (in the U.S.) can be fully explained by the rise in firm size over that time. An update studying 2004-11 shows that subsequent changes were also linked to firm size – in 2007-9, firm size fell by 17%, and CEO pay by 28%.

2.6 What we see with executive pay is seen throughout society – executives are not anomalous. Small differences in performance lead to large differences in reward, as documented by Robert Frank and Philip Cook's famous book "The Winner-Takes-All Society". The same is true with doctors, athletes, musicians, and actors. A small number of books, songs, TED talks, newspaper articles receive millions of views and sales, and most receive very few. Indeed, Kaplan and Rauh (2010) show that high CEO pay has actually not been a major cause of the rise in inequality – it has risen much more slowly than pay in law, hedge funds, private equity, and venture capital.

2.7 The same argument does not apply to employees. A CEO's actions are typically scalable (see Edmans, Gabaix, and Landier (2009) for evidence of this). For example, if the CEO implements a

new production technology, or improves corporate culture, this can be rolled out firm-wide, and thus has a larger effect in a larger firm. 1% is £10m in a £1b firm, but £80m in a £8b firm. In contrast, most employees' actions are less scalable. An engineer who has the capacity to service 10 machines creates £50,000 of value regardless of whether the firm has 100 or 1,000 machines. In short, CEOs and employees compete in very different markets, one which scales with firm size and the other which scales less so. Thus, the pay ratio is a misleading number.

2.8 The above assumes that a CEO is important to firm value. One criticism is that she is only one of very many employees. However, the evidence supports the importance of CEOs. The Flammer and Bansal (2016) and Edmans, Fang, and Lewellen (2016) papers cited above show substantial effects of CEO contracts. In addition, Falato, Li, and Milbourn (2015), Nguyen and Nielsen (2014), and Chang, Dasgupta, and Hilary (2010) show that CEO departures and deaths have a significantly negative effect on firm value and performance, and that the effect is stronger for well-paid CEOs, suggesting that pay is indeed reward for talent.

3 *How should executive pay take account of companies' long-term performance?*

3.1 Executives should be given both equity and debt with long vesting periods. This solution is very simple, addressing the issue that complexity of many existing schemes allows high pay to be hidden from society.

3.2 The evidence for the benefits of long-vesting equity has already been cited. Turning to debt, Edmans and Liu (2011) show theoretically that compensating the executive with debt as well as equity will deter excessive risk-taking (since debt loses value in bankruptcy). Empirically, Sundaram and Yermack (2007), Wei and Yermack (2011), Cassell et al. (2012), and Anantharaman, Fang, and Gong (2014) show that such debt – typically in the form of defined benefit pensions – leads to the CEO managing her firm more conservatively, leading to higher bond prices, lower costs of debt, and looser covenants. Moreover, Campbell, Galpin, and Johnson (2016) show that shareholders also benefit, suggesting that the CEO does not become excessively conservative.

3.3 The vesting of equity should not be linked to performance targets, as has become popular recently. Such targets cause the CEO to act myopically to meet the target, as shown by Bennett et al. (2016).

3.4 The vesting horizon of equity should extend beyond the CEO's departure, as shown theoretically by Edmans et al. (2012), to deter the CEO from taking short-term actions to pump up the stock price, depart, and then cash out. For example, Angelo Mozilo, the former CEO of Countrywide, made $129m from stock sales after his departure but before the financial crisis. Jim Collins's book *Good To Great* contrasts "Level 4 leaders", where the firm is only successful under the leader's tenure, with "Level 5 leaders", where the firm's success outlives the CEO. Extending the vesting horizon beyond the CEO's tenure will encourage "Level 5" thinking.

3.5 Since longer vesting periods impose more risk on executives, they may need to be paid more to compensate. However, this is a price worth paying. As discussed earlier, FTSE 100 average CEO pay is £5m, compared to average firm size of £8b. Even if CEO pay had to be doubled (an aggressive overexaggeration), that would cost 0.06% of firm value. The effect of building for the future through improving employee well-being is 2-3%.

4 *Should executive pay reflect the value added by executives to companies relative to more junior employees? If so, how?*

4.1 Yes. As explained earlier, CEOs have a much greater effect on firm value relative to more junior employees, which warrants their higher pay.

4.2 Arguments against high pay ratios rarely cite evidence that such ratios are bad. In contrast, Mueller, Ouimet, and Simintzi (2016) show that, in the UK, high pay ratios are associated with *higher* long-term profitability and firm value. This is potentially because high executive pay attracts and incentivizes top talent, who increase the size of the pie for all.

4.3 Arguments against high pay ratios are typically based on fairness and equality. Both notions must be critically discussed.

4.3i First, fairness does not mean equality, but that the reward is commensurate with contribution. A fair grade on a test does not mean that everybody receives the same grade. In a corporate context, the evidence shows that CEOs have a substantially greater effect on firm value than employees.

4.3ii Second, pay ratios aim to achieve equality by bringing the CEO down. Instead, equality is best achieved by incentivizing the CEO to bring everyone else up. By tying the CEO's pay to the long-run stock price, the CEO has incentives to treat workers well. Equality is not best solved by making everyone equally poor.

4.4 Excessive executive pay can certainly have a demoralising effect on the workforce, which should be taken seriously. However, "excessive" pay is pay that is not merited by performance. Pay should depend upon performance, not median worker pay. An executive cannot excuse poor performance (and thus low pay) by claiming that workers are still well-paid.

4.4i The improvements in disclosure, e.g. on net pay and the link between pay and performance, will help alleviate any demoralising effect.

5 *What evidence is there that executive pay is too high? How, if at all, should Government seek to influence or control executive pay?*

5.1 There is very little evidence that executive pay is too high. In fact, this is one of the areas in which the evidence is particularly misunderstood.

5.2 Three pieces of evidence are frequently cited (e.g. in Philps (2016)) as showing that executive pay is too high and unrelated to performance: a non-peer reviewed study by MSCI, an unpublished paper by Cooper, Gulen, and Rau (2016), and a paper by Florackis and Balafas (2014) published in a minor journal. All three studies share important limitations.

5.3 First, they fail to properly measure equity incentives. The MSCI study is not about equity incentives (contrary to their claim), but total pay (which includes salary and bonus). The other two papers only study newly-granted shares and options. However, the vast majority of incentives stem from previously-granted shares and options. Taking previous grants into account, the impact on a CEO's wealth of a 10% stock price fall is equivalent to a pay cut of $8m for Fortune 500 CEOs in the US and £1.5m for FTSE 100 CEOs in the UK.

5.4 Second, they fail to control for many important variables. For example, MSCI's main tables do not control for firm size. Smaller firms typically outperform large ones, and also pay their CEOs less. MSCI do not control anywhere for risk. Riskier firms typically underperform, and also pay their CEOs more as compensation for risk. Cooper et al. (2016) show that, when controlling for other variables, all components of pay become insignificant, except for options which are rarely used in the UK.

5.5 Third, they do not establish causality, which may be in the other direction. A firm that has bleak future prospects will have to pay a CEO more to attract her in the first place.

5.6 What does a correct study show? Von Lilienfeld-Toal and Ruenzi (2014) find that firms with higher CEO stock ownership – considering all ownership, not just newly-granted shares – outperform low-ownership firms by 4-10%/year over the long-run. Is causality an issue here also: perhaps a CEO who knows that her firm will do well will be more willing to accept stock (rather than cash) in the first place? Thus, to suggest causality, the authors show that the effect is stronger when the CEO has greater discretion – where product market competition and governance are weaker, institutional ownership is lower, and the CEO is more powerful.

5.7 There are indeed studies that show that incentives do not work, but these studies do not focus on CEOs. Incentives are problematic for most jobs because there is no comprehensive measure of performance, and so incentivising A induces a worker to ignore B. This is not the case for CEOs,

where the stock price is comprehensive. In the long-run, the stock price captures not just profits but also stewardship of all stakeholders: see Edmans (2016a).

5.8 The government should not aim to control pay. Murphy (2012), arguably the world's leading academic expert on pay, shows that 80 years of pay regulation in the US has almost always backfired. He concludes that (see also Edmans (2016b)):

5.8i "Over the past 80 years, Congress has imposed tax policies, accounting rules, disclosure requirements, direct legislation, and myriad other rules to regulate executive pay. With few exceptions, the regulations have generally been either ineffective or counterproductive, typically increasing (rather than reducing) CEO pay and leading to a host of unintended consequences, including the explosion in perquisites in the 1970s, golden parachute plans in the 1980s, stock options in the 1990s, and restricted stock in the 2000s. Part of the problem is that regulation – even when well intended – inherently focuses on relatively narrow aspects of compensation allowing plenty of scope for costly circumvention. A larger part of the problem is that the regulation is often misintended, driven by political rather than shareholder agendas."

5.8ii Regulation is typically driven by a few high-profile examples, rather than a systematic evaluation of all the evidence.

5.8iii Regulation is typically driven by public pressure to appear "tough" and take action, thus leading to the most interventionist action, even when undesirable.

5.9 Theresa May has made three proposals to influence executive pay. One is workers on boards, which I analyse later. A second is binding say on pay. While it appears "tough", Correa and Lel (2016) study 11 countries and find that it is less effective than advisory say-on-pay. Practitioners have expressed concern to me that binding say on pay will lead them to focus excessively on the pay vote, rather than monitoring other dimensions of firm performance (e.g. stakeholder stewardship, innovation).

5.10 There are several concerns with the proposal to disclose the ratio of CEO pay to median worker pay (see also Murphy (2012)):

5.10i As Gabaix and Landier (2008) show, CEO and workers compete in very different markets, and so there is no reason for their pay to be linked.

5.10ii A focus on the ratio may lead to a decoupling of pay from performance. A CEO might be able to justify high pay, despite poor performance, if workers are overpaid.

5.10iii The level of CEO pay has a tiny effect on firm value (0.06%). Far more important are sensitivity and horizon. Boards, investors, and society could focus excessively on this ratio, while ignoring the other (more important) dimensions.

5.10iv Where the level of CEO pay is an issue, it is a symptom of a more general corporate governance problem (e.g. of dispersed, non-engaged shareholders). Focusing on the pay ratio may encourage a company to fix this ratio while ignoring the more general problem.

5.10v The ratio will automatically vary across industries and so is not comparable. For example, it is lower in Goldman Sachs than John Lewis, but because mid-level bankers and traders are well-paid, rather than because GS executives are conservatively-paid.

5.11 More serious that being simply uninformative, pay ratios may drive unintended behaviour.

5.11i CEOs below the median may increase the ratio to the median.

5.11ii CEOs may be less willing to hire low-paid workers, instead to outsource or automate.

5.11iii CEOs may compensate their workers with cash salary, rather than on-the-job training, superior working conditions etc. since only the former affects the pay ratio.

5.11iv CEOs may focus exclusively on increasing worker salary, rather than other dimensions of social responsibility (such as non-financial reward to workers, customers, the environment, suppliers, and communities).

5.12 However, disclosure can be improved along several dimensions:

5.12i Firms should disclose not only the executive's pay over the last year(s), but also the change in her wealth. As per point 5.3, poor performance can lead to a substantial fall in wealth (whereas salary can never turn negative), so executive wealth and performance are much more tightly linked than widely thought. This may substantially increase the public's perception of fairness. For example, contrary to the belief that Bear Stearns CEO Jimmy Cayne got off scot-free from his firm's collapse, his wealth fell by $950m.

5.12ii Firms should disclose not only the percentage change in the firm's stock price over the last year(s), but the *pound sterling* change, perhaps benchmarked to a peer group. Since CEO pay is a *pound sterling* number, this allows for an apples-to-apples comparison. For example, if the stock price rose by 1% in an £8b firm, this is a rise of £80m. Then, the CEO's pay of £5m does not seem egregious, increasing the perception of fairness. Even if the CEO is only responsible for 10% of the 1% increase, her pay is fair.

5.12iii Firms should disclose *net* executive pay as well as gross. This will improve perceptions of fairness since income tax already plays a role in reducing inequality.

6 ***Do recent high-profile shareholder actions demonstrate that the current framework for controlling executive pay is bedding in effectively? Should shareholders have a greater role?***

6.1 Yes. Correa and Lel (2016) show that say-on-pay has reduced the level of pay and increased its sensitivity to performance. There is evidence that leaving pay to shareholders is working. In addition, there have been many other improvements to pay, e.g. the lengthening of vesting horizons.

6.2 However, shareholders typically do *not* see pay as excessive (a few high-profile cases aside). The common argument is that high pay results from shareholders being dispersed and disengaged. Private equity and hedge funds are highly engaged shareholders who fix many things in a company – they sell non-core assets, improve operating performance, improve innovation, and even fire the CEO. However, they rarely cut pay. Instead, the biggest change they make is to tie pay more closely to performance – again highlighting the importance of sensitivity rather than level. As a result, the level of pay actually *increases*, to compensate the CEO from bearing more risk (Cronqvist and Fahlenbrach (2013)). Thus, high pay is not a result of shareholder disengagement; engaged shareholders actually think pay is too low.

7 *Should there be worker representation on boards and/or remuneration committees? If so, what form should this take?*

7.1 No. Gorton and Schmid (2004) show that greater representation reduces long-run firm value.

7.2 Mandating worker representation sends the wrong message. It suggests that "consulting workers is bad for firm value, so we must pass a law to achieve it". Instead, we should emphasise that workers and executives are in partnership – it is in a firm's interest to consult workers. Edmans (2011, 2012) shows that employee well-being (which involves consulting) improves firm value by 2-3%/year.

7.3 Indeed, companies are *already* voluntarily improving employee well-being. Starbucks, Wal-Mart, and JP Morgan have all recently increased worker pay, without legislation. There are a growing number of organisations such as Blueprint for Better Business, Tomorrow's Company, and Big Innovation Centre, which companies pay significant sums to partner with, to implement purpose. As a senior executive said at a recent conference, "Social purpose is deeply in the C-suite. Everyone – but everyone – is seriously thinking of purpose." There is far more to be done, but change takes time. Just as CEOs should not be evaluated using short-term performance, one should not decide to regulate based on the status quo; what is important is that we are moving in the right direction.

7.4 There is a big difference between consulting workers and putting them on the board (just as firms consult customers through market research, but do not put them on the board). Pay (and other board decisions) is extremely complex. For example, what is the best way to filter out industry performance – indexed stock, indexed options, or stock with industry-adjusted performance conditions? Even compensation committees and consultants cannot agree, so it is not clear how much a worker can add. Employees may focus more on simple criteria, such as pay ratios, rather than horizon and sensitivity. A company's R&D policy is left to scientists, since they are seen as the experts; employees do not wish to weigh in. Similarly, CEO pay and other board decisions require as much expertise as science.

7.5 As a practical matter, it is unclear how worker representation should be decided. Any worker will not be representative of the workforce (e.g. a male may not be representative of females). If the representative has to follow an employee vote, it is not clear whether an employee's number of votes should depend on his pay grade, or number of years of service, or if under-represented minorities should receive more votes. This contrasts shareholder elections of directors, where "one-share-one-vote" is theoretically founded (Harris and Raviv (1988)).

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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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