

Who Gained, who Lost? The Distributional Impact of COVID-19 Government Support for Business

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Executive Summary

Government support to business during the COVID-19 pandemic was consistently justified on the basis of general interests, such as ‘protecting jobs and livelihoods’ and helping to ‘ease the financial burden for businesses and the UK population’ (Chapter 1). But these rather abstract, universal goals potentially gloss over important questions about the redistributive effects of government subsidies.

The pandemic had uneven economic effects, which government support schemes at best only weakly addressed. Low-paid, part-time, and young workers – those least able to afford it – were significantly more likely than other groups to be furloughed with reduced pay. In April 2020, more than half of employees in the lowest decile of hourly earnings (less than £8.72 per hour) were on furlough with reduced pay. In the same month, 1.3 million furloughed employees were paid below the minimum wage. This included a third of people working in the accommodation and food sector (Chapters 1 and 2).

Government supported loan schemes, meanwhile, baked in existing economic inequalities between smaller businesses and major banks. Schemes targeting smaller businesses underwrote loans made by banks and other lenders, and also covered lender fees and interest payments in the first year at a combined cost of £1.5 billion (Chapter 2). In addition to their obvious macro-economic stabilisation effects, they allowed banks to profit from new streams of interest payments and moderated the impact of growing loan books on retained capital requirements (Chapter 2).

But whilst lenders were given guarantees against default, borrowers have remained fully liable for their debts. Debt among smaller businesses has increased significantly, driven primarily by government backed loan schemes (Chapter 1). SMEs took on £47 billion in additional finance between April 2020 and March 2021, equating to an increase in the stock of SME debt of around 30% from prior to the pandemic (Chapter 1). Towards the end of 2021, the Bank of England reported that the share of SMEs with debt had doubled since the onset of the pandemic, 33% had debt levels more than 10 times their cash balance or were in overdraft, up from 14% before the pandemic (Chapter 1). This is reflected in a sharp upturn in corporate insolvencies. Total company insolvencies in England and Wales in the second quarter of 2022 were 81% higher than the second quarter of 2021, with the number of creditors’ voluntary liquidations having increased to the highest quarterly level since 1960 (Chapters 1 and 2).

Given present efforts to tackling public sector debt, how money under government support schemes has been used, and to whose benefit, are key questions. How, for example, did large businesses in receipt of subsidies adjust executive compensation packages and payments to shareholders when economic disruption was at its peak? Equally, how did they respond once the worst of the economic disruption passed, and how have they treated their workers?

Scheme Design and Transparency

Private Gain or Public Benefit – who decides?

These questions are particularly important given that few schemes contained restrictions on executive pay or capital distributions. Those restrictions that did apply were limited, subject to exemptions, and characterised by weak enforcement mechanisms (Chapter 2). This has effectively given companies

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ultimate discretion to determine where the line between private gain and public losses should be drawn.

Whilst, for example, a significant minority of companies returned grants obtained under the Coronavirus Job Retention Scheme (CJRS), which supported employees on furlough leave, we found no statistically significant association between whether companies paid back grants and company earnings, dividends to shareholders, or executive pay.

In practice, many companies that retained CJRS grant income – which allowed them to save on large direct and indirect costs of redundancies – made large profits, paid out large sums in dividends to shareholders, and awarded board executives large pay rises (Chapter 2). For instance, just 5 companies that furloughed employees in 2020/21 (at a total value of £303 million) generated £6.5 billion in profits (EBITDA) in that year. Likewise, the 5 highest dividend paying companies that held on to grants under CJRS received in 2020/21 (at a total value of £352 million) paid out £1.3 billion to shareholders in that year. Significantly, a large proportion of the shareholdings of these companies are owned by overseas investors. As at February 2023, overseas ownership of traded shares in Compass Group (£427 million to shareholders in 2020/21), Tui (£289 million to shareholders in 2020/21), and EasyJet (£174 million to shareholders in 2020/21), for example, was at least 51.7%, 41.9%, and 27.4% respectively (source: Eikon Refinitiv). Finally, CEOs at 5 companies which did not pay back grants taken under CJRS in 2020/21 received increases in total pay above 99% between 2019/20, before the economic disruption caused by the pandemic took effect, and 2021/22. The largest increase in total pay over the period was 260%. This went to the CEO of transport company, FirstGroup, which received over £50 million under CJRS (Chapter 2).

A similar pattern applied to Business Rates Relief, which covered companies in the retail, leisure, and hospitality sectors (Chapter 2). Just 5 companies that accepted business rates relief in 2020/21 generated a total of almost £5 billion in profits (EBITDA) in 2020/21 (Chapter 2). The 5 highest dividend paying companies that accepted the relief in 2020/21 paid out £540m to shareholders in that year. As with companies that did not pay back government money provided under CJRS, a large proportion of the shareholdings of these companies are owned by non-UK based investors. As at February 2023, overseas ownership of traded shares in WH Smith (£47 million to shareholders in 2020/21) and Cineworld (£38 million to shareholders in 2020/21), for instance, was at least 42%, and 27% respectively (source: Eikon Refinitiv). Finally, CEOs at 4 companies which did not pay back business rates relief taken in 2020/21 received increases in total pay above 99% between 2019/20 and 2021/22. The total pay of the CEO of betting company, Flutter Entertainment, for example, increased by 283% over the period (Chapter 2).

In short, poor scheme design has allowed less scrupulous companies to enrich owners and senior executives with public money.

Public Ignorance and Private Gain

A major problem in determining the immediate distributional effects of government support is that public availability of employer-level data for support schemes has been limited. Government departments failed to publish employer-level data for all but four schemes relevant to larger businesses (Chapter 3).

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This leaves company annual reports and accounts as the only method for identifying how, and how much, large public companies have benefited from government support. In practice, however, annual reports and accounts are also limited as a source of firm-level data. Many companies reported receiving supports, but not their precise value (Chapter 3). This reflects the limited scope of financial reporting standards, the fact that they do not require disclosure of grant income in consolidated accounts by scheme or country, and, in some cases, weak understanding by some companies of disclosure provisions contained in reporting standards (Chapter 3).

The sheer scale of public money involved in supporting companies during the pandemic is just one of several considerations relevant to assessing the public policy implications of this lack of transparency. Knowing which businesses benefited from government subsidies, by how much, and what they have done with the money, is not only important to fair and effective subsidy design but is also key to political accountability and public trust.

Executive Pay

Prior to the pandemic, total executive pay had seen consistent annual declines since 2016/17. The rate of decline deepened during the peak of the pandemic (2020/21), driven by falls in bonuses and payments under long term incentive plans (LTIP) (Chapter 4). Mean and median total pay for chief executive officers (CEOs) at FTSE 100 companies, for example, fell 26% and 13% respectively between 2019/20 and 2020/21, and 22% and 7% for CEOs at FTSE 250 companies. Chief financial officers (CFOs) saw broadly similar declines.

In respect of key specific components of pay, moving into the pandemic (2019/20-2020/21) the fortunes of executives at companies propped up by the state were no worse than those whose companies that weathered the pandemic without support. For example, whether companies received government support or not had no effect on the extent to which FTSE 100 executive bonuses fell between 2019/20 and 2020/21. In fact, the decrease in bonuses was marginally less for CEOs in FTSE 100 companies which arranged financing under the Covid Corporate Financing Facility (CCFF) (Chapter 4).

Nonetheless, efforts by shareholder bodies and others to ensure pay moderation for executives at companies receiving government support appear to have been reflected in pay awarding behaviour in 2020/21. For instance, between 2019/20 and 2020/21, CEOs in FTSE 100 companies that received grants under CJRS, support from overseas governments to support jobs and wages (international wage support), and which deferred tax experienced a statistically significantly greater decrease in total pay compared to those in FTSE 100 companies that did not receive these supports.

A Post-Pandemic Restitution Culture in Executive Pay?

Coming out of the pandemic, moderate pay restraint among CEOs and CFOs came to an abrupt halt at many companies. The data support the existence of a *post-pandemic restitution culture* in executive pay, where companies across the FTSE 350 have sought to make good losses in CEO and CFO pay experienced during the peak of the pandemic. This restitution culture has reversed the longer run decline in executive pay and, significantly, appears greater in companies that participated in government support schemes, which have seen substantial executive pay increases.

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On most indicators, big increases in total pay took executive pay well beyond pre-pandemic levels (Chapter 4). These increases were driven by big upturns in bonuses and LTIP payments. Bonus awards – which are determined on an annual basis – were instrumental in enabling executives to claw back losses in pay during the pandemic. In 2021/22, mean and median bonus pay for CEOs at FTSE 100 companies were both 51% higher on average than those paid out in the year prior to the pandemic. At FTSE 250 companies mean and median bonus pay increased 37% and 43% over the same period (Chapter 4). In some cases, bonus plans were specifically adjusted to reflect the increased difficulties executives faced in meeting financial targets under more challenging economic conditions (Chapter 5).

Although average increases in LTIP payments to FTSE 100 CEOs did not take them beyond 2019/20 levels, average LTIP payments to CEOs at FTSE 250 companies and CFOs at FTSE 100 and FTSE 200 companies were significantly higher than before the pandemic. Mean and median LTIP payments to FTSE 250 CEOs in 2021/22, for example, exceeded pre-pandemic payments by 63% and 56% (Chapter 4).

A Restitution Culture in Executive Pay at Companies that took Government Support

Importantly, the resurgence in executive pay at companies supported by the government during the pandemic was particularly marked. For the most part, losses in pay experienced during the peak of the pandemic have been clawed back by executives and, as with FTSE 350 companies generally, the short-run decline in pay (since 2017/18) leading up to the pandemic has been reversed, with pay awards in 2021/22 greater than they were prior to the pandemic (Chapter 4). Controlling for other relevant variables, CEOs in FTSE 100 companies in receipt of money under the CJRS, for example, enjoyed significantly higher increases in total pay than those in other FTSE 100 companies. Increases in bonus payments for CEOs and CFOs at FTSE 250 companies that received money under the CJRS and deferred tax were significantly greater (Chapter 4).

Looking back to the year prior to the introduction of pandemic-related restrictions (2019/20), receipt of grants under CJRS had a positive impact on bonuses received by FTSE 100 and FTSE 250 executives. Finance arranged under CCFF in 2020 also had a positive impact on bonuses received by executives in FTSE 250 companies (Chapter 4).

Pay Ratios

Broadly, trends in pay ratios follow trends in CEO remuneration. Average pay ratios among FTSE 350 companies at all levels of the employee pay distribution decreased substantially in the first year of the pandemic compared with the previous year, as CEO pay fell (Chapter 5).

Pay ratios in 2021/22 increased significantly for FTSE 100 companies, with the median pay ratio returning to pre-pandemic levels. In proportionate terms, pay ratios in FTSE 250 companies increased to a much greater extent, exceeding levels reached in 2019/20 (Chapter 5).

Government Support and Post-Pandemic Pay Inequality

In some cases, whether companies received government supports was significantly associated with the rate of increase in pay ratios. For example, controlling for other factors the increase in median and

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upper quartile pay ratios was significantly greater for FTSE 100 companies that received Business Rates Relief. Among FTSE 250 companies, receipt of grants under CJRS, deferred tax, and Business Rates Relief were all associated with a greater increase in the pay ratio at the lower, median, and upper quartiles (Chapter 5).

Notwithstanding this, trends in pay ratios and employee quartile pay need to be understood with reference to the underlying validity of pay ratio data. Pay ratio data exclude indirectly employed workers. They are also sensitive to changes in employee composition. Both characteristics diminish their value as a method for tracking firm and sector-level income inequalities. Companies with the greatest increases in lower and median employee quartile pay between 2019 and 2022, for example, had frequently either disposed of their UK operations or made significant redundancies. In addition, pay ratio data can obscure unscrupulous employment practices. Several companies accused of ‘fire and rehire’ practices during the pandemic posted some of the highest annual increases in lower quartile and median employee pay. In short, major movements in reported employee quartile pay data appear to reflect major movements in employees, rather than their pay (Chapter 5).

With specific reference to the pandemic and the effect of government supports on pay ratio data, the relatively widespread practice of placing employees on furlough leave among FTSE 350 companies has had a non-trivial effect on the value of pay ratio data as a means of comparing firm-level inequalities in pay either over time in the same company, or within and between different sectors. A significant minority of companies excluded furloughed employees in their pay ratio calculations. We excluded such companies from our modelling. However, several companies also made major redundancies during the peak of the pandemic. On balance, as with the practice of excluding furloughed employees from pay ratio calculations, this is likely to have inflated lower, median, and upper quartile pay and compressed pay ratios (Chapter 5).

Dividends

Dividend pay-outs to shareholders dropped sharply during 2020/21. Importantly however, receipt of government support was not significantly associated with a greater decrease in dividend payments for either FTSE 100 or FTSE 250 companies. In fact, FTSE 100 companies in receipt of Business Rates Relief made significantly higher dividend payments compared with companies that did not take the support.

Although dividend payments across the FTSE 350 began to recover in 2021/22, they have yet to return to pre-pandemic levels. There is also some evidence to suggest that FTSE 100 companies that took some government supports scaled back dividend payments to shareholders. Specifically, FTSE 100 companies that accepted Business Rates Relief and took government money at home and abroad to support jobs and wages paid lower dividends to shareholders in 2021/22. However, controlling for other relevant factors, there have been no significant differences in dividend payments between FTSE 250 companies that did and did not receive government support.

Chapter 1. Introduction

In March 2020, in response to the COVID-19 pandemic, the government effectively shut down large parts of the economy. This was the first of three major lockdowns that ended in June 2021,¹ during which businesses in non-essential sectors that required close social interaction were forced to close and other workers were ordered to work from home. In the first year of lockdowns, headline gross-domestic product declined by 9.9%, the steepest drop since consistent records began [2, 3]. In addition, lockdowns had big effects on the demand for different goods and services. Spending on travel and eating out saw the steepest declines [4], high street trade collapsed, and online sales rose to a record high of 34% of all retail spending [4].

The impacts of pandemic-related economic disruption on affected business, particularly smaller businesses without large cash reserves [5, 6] were considerable. One British Chambers of Commerce survey, published in early April, suggested that 57% of British businesses² did not have enough cash to survive beyond three months of lockdown and that 6% had already run of cash [8]. The government's response was realised principally through cash grants, government-backed loans and tax reliefs to businesses (Chapter 2), much of which was funded by an extension of the Bank of England's Asset Purchase Facility, which peaked at £895 billion towards the end of 2021 [9]. In the round, government support represented an unprecedented peacetime transfer of capital from the public to the private sector: with the Coronavirus Job Retention Scheme (CJRS) alone costing the Treasury £70bn [10].

1.1 COVID-19 Support to Business and Economic Equity

Government support to business during the pandemic (hereafter COVID-supports or government supports)³ has consistently been justified on the basis of common interests: 'protecting jobs and

¹ The first national lockdown ran from late March to June 2020. Most lockdown restrictions were lifted on 4th July 2020. Some restrictions were reimposed from mid-September with the government introducing a 'three tier system' of local restrictions in mid-October. On 5th November national restrictions were reintroduced, which included the closure of non-essential high street businesses. On 2nd December tiering was reintroduced and on 19th December a fourth tier was announced, which involved restrictions similar to those imposed during the second national lockdown. On 30th December most of the country was placed under tier four restrictions and then on 6th January 2021 national restrictions were reintroduced akin to those imposed during the first lockdown. On 8th March 2021, a phased exit from lockdown began [1].

² The survey was conducted between 1st-3rd April 2020 and included over 1,000 business participants, 95% of which were small and medium-sized enterprises [7].

³ Under normal circumstances many COVID-supports to business would be regarded as formal government subsidies. The Draft Statutory Guidance on the United Kingdom Subsidy Control Regime defines a subsidy as support by a public authority which confers an economic advantage on an enterprise or enterprises, which includes grants, tax breaks, loan guarantees, and loans at below market rates [11]. Given their general application and the exceptional circumstances in which they were introduced, COVID-support schemes fall outside of the new subsidy control regime. For financial assistance to fall within the terms of the Subsidy Control Act 2022, it must be specific (in that it benefits one or more enterprises over one or more enterprises with respect to the production of goods and services) and at least be capable of influencing competition or investment within the UK or trade and investment between the UK and another territory. Measures which treat all enterprises equally – and which do not have a material impact on trade and investment between the UK and another territory - may not, therefore, constitute a subsidy for the purposes of the Act. Further, and more importantly, subsidies given to ameliorate the effects of exceptional circumstances, such a major pandemic, are not subject to subsidy control requirements.

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livelihoods' [12] and helping to 'ease the financial burden for businesses and the UK population' [13]. But these rather abstract universal goals potentially gloss over deeper questions about the redistributive effects of government-support schemes.

The pandemic had uneven economic effects [14-17], although the picture is a complex one shaped by the nature of support for households and their sources of income. Cribb, et al (2022), for example, report that median income fell 1.7% between 2019/20 and 2020/21, but that income of poor household increased in real terms amounts – more than 3% for the bottom fifth [16]. This reflected relatively large, temporary, increases in benefits and the fact that the poorest households suffered less from falls in employment income [16]. By contrast, survey data from September 2020, shortly after the first lock down, found that 28% of adults saw their income fall more than their spending over the preceding summer months. This applied to 32% of adults from the lowest income quintile, compared to 24% of adults in the highest income quintile. At the same time, high-income adults were more likely to have seen their family budgets improve compared to their position before the pandemic, with 35% seeing their income rise relative to spending [18]. The survey also found a much higher proportion of people (29%) unable to afford at least three basic items (such as heating the home when needed) among those whose income was negatively affected by the pandemic compared to those whose incomes were unaffected (10%) [18].

These uneven economic effects were only weakly addressed by government support schemes to business. The CJRS, for example, only covered 80% of wages⁴ up to a cap £2,200 a month (Chapter 2, **Table 2.4**). Employers were neither required to top this up to protect existing wages nor place restrictions on the pay of senior executives or pay outs to shareholders. Office for National Statistics Survey data suggests that about 40% of furloughed employees in the private sector did not receive a top up to their wages in the first iteration of the scheme [19]. Low-paid, part-time, and young workers – those least able to afford it – were also significantly more likely to be furloughed with reduced pay. In April 2020, more than half of employees in the lowest decile of hourly earnings (less than £8.72 per hour) were on furlough with reduced pay. In the same month, 1.3 million furloughed employees were paid below the minimum wage. This included a third of people working in the accommodation and food sector [20].

Government supported loan schemes, meanwhile, baked in existing economic inequalities between smaller businesses, their employees, and major banks. In addition to underwriting loans made by banks and other accredited lenders, loan schemes targeting smaller businesses – such as the Bounce Back Loan Scheme and Coronavirus Business Interruption Loan Scheme – covered lender fees and interest payments in the first year at a combined cost of £1.5 billion.⁵ But whilst accredited lenders were given guarantees against default, an effective subsidy to large banks who shouldered much of the lending under the schemes [22], borrowers – typically small and medium-sized enterprises (SMEs) – have remained fully liable for their debts [5].⁶

⁴ See Chapter 2 for variations in wage support across the various versions of the CJRS.

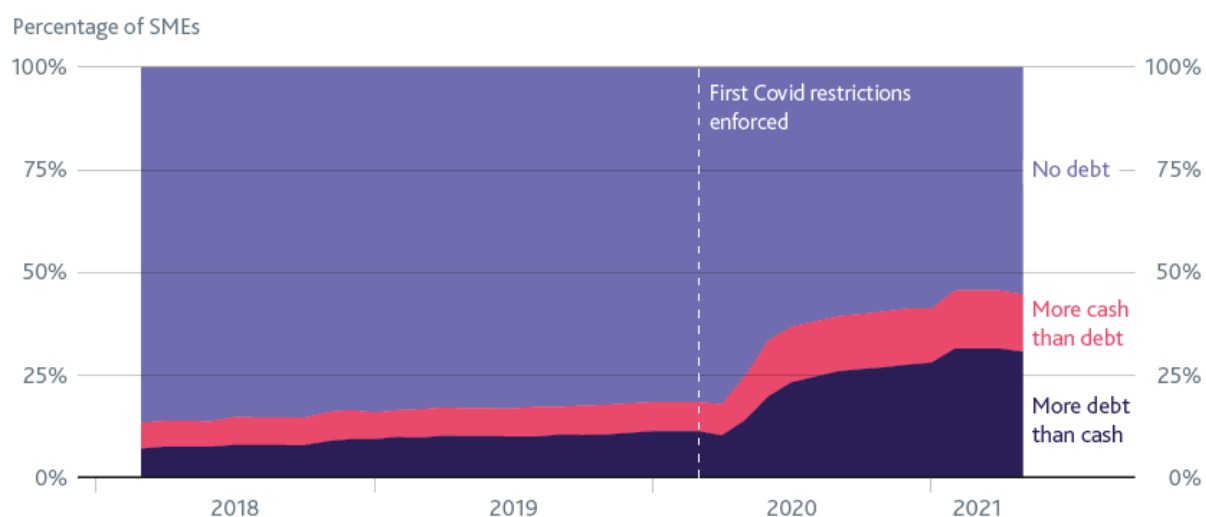
⁵ The cost to the Treasury of lender fees for loans and interest payments in the first year for CBILs and BBLs were £701 million and \$832 million respectively [21].

⁶ Borrowers were not required to provide personal guarantees for BBLs or CBILs under £250,000 [23]. Current HMRC guidance to lenders recommends that loan defaults are pursued via normal methods, which include letters, statutory demands, and potential court action. In respect of sole traders, while no recovery action can be taken against homes or vehicles, other personal assets are potentially still at risk.

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The British Business Bank reported that SMEs took on £47 billion in additional finance between April 2020 and March 2021 [24].⁷ Analysis by the Bank of England published towards the end of 2021 indicated that the share of SMEs with debt had doubled since the onset of the pandemic, driven primarily by government backed loan schemes (**Figure 1.1**) [25, 26].⁸ The same analysis found: that 33% of SMEs had debt levels more than 10 times their cash balance or were in overdraft, up from 14% before the pandemic; and that 18% had monthly debt repayments over 15% of their current account inflows, up from 3% before the pandemic. Around 10% of SMEs fell into both categories, having both high debt levels and repayments [25, 26]. Many SMEs that took out loans had not previously borrowed [26].

Figure 1.1: Net Debt Positions of UK SMEs



Source: Bank of England (2021) [The Impact of the Covid Pandemic on SME Indebtedness](#). London: Bank of England.

The effect of the schemes on medium term economic and productivity growth are all too plain. Debt was predominantly taken on to meet liquidity and cashflow needs [27], and is unlikely to have added to the productive capacity of SMEs. This will have raised the risk of debt overhang, where debt repayments make up an excessive share of annual costs with the effect that borrowing to invest is either closed-off, unaffordable, or unrewarding as the benefits from additional investment accrue largely to existing holders of debt [27, 28]. More importantly in terms of the welfare of SME owners and their employees⁹ is the ongoing risk of default and insolvency. Early estimates of the scale of default from the government's loan schemes were considerable – £17bn for the Bounce Back Loan Scheme alone [21].¹⁰ The Bank of England warned of an increase in the number and scale of more

⁷ This represented an 81% increase on longer term trends and equated to an increase in the stock of SME debt of around 30% from prior to the pandemic [24].

⁸ The Bank's analysis was based on data covering 2 million limited company SMEs. The analysis found that around 757,000 SMEs were holding debt [25]. Total gross SME term lending in 2020 was estimated at £104 billion in 2020, driven by £57 billion of BBLs and CBILs lending, compared to an average of £58 billion of gross term lending over the prior 5 years. Net term lending was £46.8 billion in 2020, up from £1.9 billion the previous year [27].

⁹ SMEs account for three fifths of the employment in the UK private sector, the majority of which (56% of the total) are sole proprietorships [29].

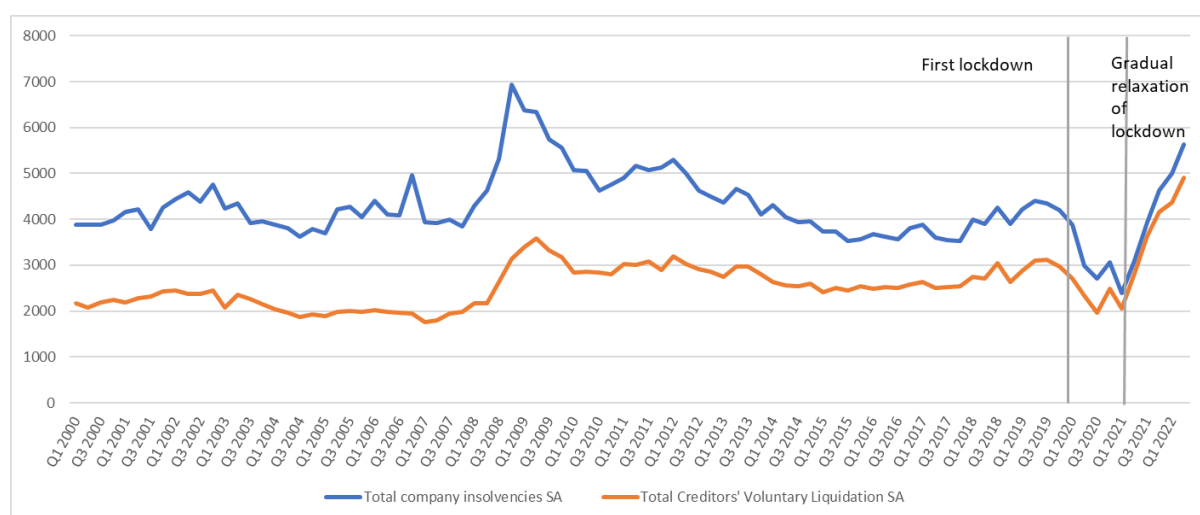
¹⁰ This included an estimated £4.9 billion lost to fraud [21, 30]. The Department for Business, Energy and Industry Strategy (BEIS) has since revised its central estimate of fraud and error in BBLs, with 3.49% (£1.12 billion) now estimated to be the Department's outstanding exposure to fraud loss that will arise from claims against the BBLs

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vulnerable businesses [26] and, as early as 2021, noted that an increasing proportion of SMEs were reporting concerns about their ability to make debt repayments (7% in the second quarter of 2021, compared to 4% before the pandemic) [26].

These concerns have been reflected in a substantial uplift in corporate insolvencies, which have been exacerbated by rising energy prices (**Figure 1.2**). In the second quarter of 2022, total company insolvencies in England and Wales reached their highest quarterly level since the third quarter of 2009, 81% higher than the second quarter of 2021. The number of creditors’ voluntary liquidations increased to the highest quarterly level since the early 1960s, with more than 1 in 10 UK businesses reporting a moderate-to-severe risk of insolvency (August 2022) [32, 33].

Figure 1.2: Total company insolvencies per quarter, seasonally adjusted, England and Wales, Q1 2000-Q2 2022.



Source: Office for National Statistics (2022) [Total company insolvencies per quarter, seasonally adjusted, England and Wales](#). London: Office for National Statistics.

Post-lockdown, government policy has done little to ameliorate economic stress for large parts of the population. Lower tax receipts combined with the costs of COVID-related support schemes resulted in record public sector borrowing. In the financial year ending March 2021, public sector net borrowing was £317.6bn [34], equivalent to 15% of gross domestic product, the highest since 1946 [35]. Public sector net borrowing fell to £151.8bn in the following financial year [34], but this was still broadly equivalent to the pre-pandemic record for 2010 during the economic downturn following the global financial crisis [35]. Government debt – the stock of its past borrowing – increased, from around 83% of gross domestic product prior to the pandemic to about 102% at the end of 2021 [36]. Despite relatively low borrowing costs in 2021,¹¹ the government’s initial response to rising government debt

guarantee [31]. The latest total estimated liability for financial guarantees relating to BBLs as at 31st March 2022 was £13.95 billion [31]. BEIS’s latest annual report noted that 7% of facilities under BBLs were in arrears and 8% of facilities had been subject to a default [31].

¹¹ Coming out of the pandemic these were at record lows as Bank of England purchases of government debt almost matched government borrowing over the period [37]. Relative to recent trends, net debt interest payments (which takes into account debt interest saved by the Bank of England holding some government debt) are increasing. This is largely because interest paid on about a quarter of government debt is linked to inflation.

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centred on measures which impacted heavily on people in work and on benefits [38]. These included increases in national insurance [39], freezes in the personal allowance and higher rate threshold [38, 40], large effective tax rises for graduates [41], and real term cuts in public sector pay [42-44] and welfare benefits [45, 46]. The November 2022 budget introduced £55 billion of tax rises and public spending cuts [47], including freezing personal allowance, income tax, and national insurance thresholds until 2028 [47]. Combined with rising inflation, real-term falls in income for many households, and the negative effects of the pandemic on personal finances, one result has been growing personal debt for those on lower incomes [18, 48-50].

In light of the government's current approach to tackling public sector debt, how government supports to business have been used, and to whose benefit, are key questions. How did businesses in receipt of government supports adjust compensation packages for executive board members and payments to shareholders when economic disruption was at its peak? How did they respond once the worst of the disruption was over, and how have they treated their workers? This report addresses these questions. In addition, it addresses the important question of how easy these questions are to answer. Knowing which businesses benefited from government supports, by how much, and what they have done with the money, is not only important to fair and effective design of government supports, but, as the government itself acknowledges, it is also in the 'public interest' [51]. Transparency around how public money is spent is key to political accountability and trust, which are both fundamental to functioning democracies.

Reflecting the more exacting reporting requirements on executive pay for publicly listed companies in the UK, our analysis focuses on 246 businesses listed on the FTSE 350.¹² Chapter 2 provides a brief summary of the supports available to large businesses and takes a closer look at some of the companies that benefited from them. It looks at the conditions attached to government support, estimates of their costs to the Treasury, which companies took them, who repaid them, and how key corporate stakeholders – executive directors, shareholders, and workers – fared financially. Chapter 3 explores the question of transparency. In most cases, public data on government support to business is incomplete, opaque, or non-existent, leaving company financial statements as the main source of firm-level data. We examine how well companies disclosed the government support they received, the weaknesses in the reporting framework governing the disclosure of government support in financial statements, and the methodological challenges in identifying government support received by large multinational companies. In Chapter 4 we summarise difference-in-difference statistical models, analysing the impact of furlough, deferred tax, business rates relief, and international furlough on executive pay and its components (basic pay, bonuses, and long-term incentive plans) and share dividends. In the fifth and final chapter, we take a brief look at employee pay. We begin by

¹² The sample (n=246) is based on the FTSE 350 as of 31st December 2021. Excluded (n=104) companies included those without firm-financial data for at least a year prior to March 2020 (e.g., companies subject to an initial public offering post March 2019) and companies which did not otherwise report executive remuneration data consistently post March 2019, reflecting exceptions to remuneration reporting obligations outlined in the Companies Act 2006, The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 [52], Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013 [53], and The Companies (Directors' Remuneration Policy and Directors' Remuneration Report) Regulations 2019 [54]. Excluded companies under this second criterion primarily included: real estate investment trusts; other collective investment vehicles; companies with no operations in the UK; other companies with fewer than 250 employees. A list of included companies and our approach to collecting remuneration and other data are provided in Appendix 1.

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examining the validity of company pay ratio data, before moving on to examine trends in employee quartile pay and pay ratios. Among other things, we examine trends in quartile pay and pay ratios in different sectors and compare changes in pay ratios for companies that did and did not receive government support.

Chapter 2. COVID-Support to Large Businesses: An Overview

Key Findings

- Few schemes available to large businesses were subject to formal programme restrictions on executive pay and capital distributions. Restrictions that did apply were relatively limited, subject to exemptions, and characterised by weak enforcement mechanisms.
- A significant minority of companies either fully or partially repaid grants under the Coronavirus Job Retention Scheme (CJRS).
- On average, firms that retained grants under CJRS generated lower earnings (EBITDA) than firms that either fully or partially repaid CJRS money. However, there is no statistically significant relationship between full or partial repayment of grants and earnings.
- Several companies that retained grants under CJRS reported large earnings (EBITDA). For instance, three companies that retained money received under the scheme in 2020/21 – Owners of Primark, Associated British Foods, Centrica, and FirstGroup – each generated earnings of over £1 billion. In the following year, Associated British Foods and Centrica again each generated earnings over £1 billion, alongside Rolls-Royce Holdings, and Chertsey-based contract food service company, Compass Group.
- In general, firms that retained grants under CJRS paid out less in dividends to shareholders on average than firms which either fully or partially repaid CJRS money with one exception. Companies that retained grants under CJRS received in 2021/22 made higher dividend pay-outs to shareholders in 2021/22 than companies that either fully or partially repaid grants. Further, in general, there is no statistically significant relationship between repayment of grants received under CJRS and dividend payments. In other words, even where firms that retained grants in a given year may, on average, have paid out less in dividends to shareholders (either in the year of receipt or in the subsequent year) than firms which either fully or partially repaid CJRS grants, there was no consistent pattern of payment to shareholders between the two groups.
- Of companies retaining grants under CJRS received in 2020/21, at least 18 made dividends payments in 2020/21. Compass Group, Tui, Associated British Foods, and EasyJet alone received and retained over £366m under CJRS in 2020/21, whilst at the same time paying over £1.16 billion in dividends to shareholders in that year.
- Both the mean and median percentage changes in total executive pay between 2019/20 and 2021/22 were lower at companies that retained CJRS grants compared to companies that repaid them. However, there is no statistically significant relationship between repayment of grants received under CJRS and percentage changes in executive pay. Again, this suggests that there is no consistent pattern in changes in total executive pay between the two groups.
- On average, firms that retained Business Rates Relief generated lower earnings (EBITDA) than firms which either fully or partially repaid the relief. However, save for one exception (Business Rates Relief received in 2021/22 and earnings in 2020/21), we found no statistically significant relationship between full or partial repayment of Business Rates Relief and profits (EBITDA).

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- On average, firms that retained Business Rates Relief generally paid out less in dividends to shareholders than firms which either fully or partially repaid the relief. However, firms that repaid Business Rates Relief did not generally make statistically higher dividend payments than firms that retained the relief, save for one exception. Firms that repaid relief received in 2021/22 made statistically higher dividend payments in 2021/22 compared to companies that retained the relief for that year.
- For firms that received business rate relief in 2020/21, average percentage changes in total executive pay were generally lower at companies which retained Business Rates Relief compared with those at companies which repaid the relief. However, both the mean and median percentage change in total executive pay between 2020/21 and 2021/22 were higher for companies that retained Business Rates Relief received in 2021/22 compared to the percentage change in executive pay at companies that repaid the relief. Notwithstanding this, there is no statistically significant relationship between full or partial repayment of Business Rates Relief received in either 2020/21 or 2021/22 and the percentage change in total executive pay between the period immediately prior to the imposition of pandemic-related restrictions (2019/20) and the year following the peak of the economic disruption caused by the pandemic (2021/22).
- Executives at several companies which retained Business Rates Relief saw very large increases in executive pay between 2019/20 and 2021/22. Executives at Watches of Switzerland, the betting company, Flutter Entertainment, and Dunelm Group, for example, saw their pay increase by over 200%.
- Government loan schemes – which look set to cost the public upwards of £20 billion – have benefited major banks in several key respects whilst passing the risk onto the government and borrowing public. In addition to their macro-economic stabilisation effects, they have allowed banks to profit from new streams of interest payments and have moderated the impact of growing loan books on retained capital requirements under the Basel Framework.

2.1 Introduction

Early in the pandemic, the government announced plans for a package of support schemes worth more than £330 million, including the Coronavirus Job Retention Scheme (CJRS), government supported loan schemes, and Business Rate Relief for businesses in the retail, hospitality or leisure sector [55]. As the pandemic progressed, other, smaller schemes – such as Eat-Out-To-Help-Out – were introduced, and many of the original schemes were extended and redesigned.

In this chapter we provide an overview of the main support schemes available to large businesses. The chapter is split into two main sections. The first outlines the key characteristics of the main support schemes available to larger businesses (**Table 2.1**), provides descriptive data on the extent to which they were used by companies in our sample, and presents the results of simple inferential statistical tests on repayment patterns for companies that participated in the CJRS, and which were eligible for Business Rates Relief. In relation to the statistical data, we focus on differences in reported profits (EBITDA), dividends to shareholders, and executive remuneration for companies that retained and repaid CJRS grants and Business Rates Relief. The second section examines restrictions in schemes related to executive pay and capital distributions to shareholders and outlines other efforts by the Bank England and investor bodies to manage the distributional effects of companies participating in government support schemes.

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Table 2.1: COVID-Related Business Support Schemes relevant to Large Businesses¹³

Sector Relevance	Scheme ¹⁴	Scheme Duration	Cost to the Treasury
Limited or no sector restrictions	Coronavirus Job Retention Scheme	Mar 20-Sept 21	£70.0 billion [10]
	Joint HM Treasury and Bank of England's Covid Corporate Financing Facility	Mar 20-Mar 21	All loans repaid with interest
	Deferred value added tax (deferred VAT)	Feb 20-Mar 22	(est.) £1.94 billion [60] ¹⁵
	Coronavirus Large Business Interruption Loan Scheme	Apr 20-Mar 21	(est.) *£357 million [21]
Financial Sector (accredited lenders)	Bounce Back Loan Scheme ¹⁶	May 20-Mar 21	(est.) £17.22 billion [21]
	Coronavirus Business Interruption Loan Scheme	Mar-20-Mar 21	(est.) £2.29 billion [21]
	Coronavirus Large Business Interruption Loan Scheme	Apr 20-Mar 21	(est.) *£357 million [21]
Hospitality, Leisure, Tourism, and Retail	Expanded Retail Discount (Business Rates Relief)	Mar 20-Mar 22	(est.) £10.8 billion-£12.04 billion [60-63]
	Temporary reduced VAT	July 20-Mar 22	(est.) £8.36 billion [60, 62, 64-69]
	Eat-Out-to-Help-Out	Aug 20	£849 million [60, 70, 71]
	Christmas Support Payment for wet-led pub	Dec 20-Feb 21	£23 million [72]
	Retail, Hospitality and Leisure Grant Fund	Apr 20-Sep 20	>£11.1 billion [72] ¹⁷
	Omicron Hospitality and Leisure Grant / Coronavirus (COVID-19): local authority discretionary fund	Dec 21-Mar 22	£455 million [61, 72] / £120m [73]
	COVID-19 Bus Service Support Grant / Bus Recovery Grant (England)	Apr 20-Aug 21 / Sept 21-Oct 22	£1.48 billion [74, 75] / £401 million [74-77]
COVID-19 Support Grant / COVID-19 Support Grant – Restart (Scotland)	Apr 20-Mar 22 / Jun 20- Mar 22	-	
Travel	Bus Hardship Scheme / Bus Emergency Scheme / Bus Emergency Scheme 2 (Wales)	Mar 20-Jul 20 / Aug 20-Mar 21 / Apr 21-Jul 22	£29 million [78] / £100 million / £37 million [79]
	Emergency Measures Agreements / Emergency Recovery Measures Agreements (train operating companies)	Mar 20-Sept 20 / Sep 20-Mar 22	£12.0 billion [80, 81] ¹⁸
	Emergency Measures Agreements / Emergency Measures Agreements 2 (training operating companies) (Scotland)	Mar 20- / -Mar 22	£1.01 billion [82, 83] ¹⁹

¹³ Excluded are ongoing Business Rates Relief [56], the Local Restrictions Support Grant Scheme (and comparable schemes in Scotland, Wales, and Northern Ireland), support under the Government Sport Survival Package [57, 58], the Recovery Loan Scheme, and the Airport and Ground Operations Support Scheme [59]. Although available to larger businesses, these schemes do not appear to have been used by companies within our sample.

¹⁴ Names of English based schemes provided unless otherwise stated.

¹⁵ HM Treasury's estimate constituted the proportion of deferred receipts projected (November 2020) which were not expected to be recovered. The figure includes the estimated cost for the VAT New Payment Scheme [60].

¹⁶ As at 31 March 2021, HM Treasury was exposed to total guaranteed lending under BBL, CBILS, and CLBILS of £66,510 million [21]. The reported liability of £19,773 million for the three schemes was measured as the present value of expected payments to reimburse guarantee holders for credit losses incurred less amounts expected subsequently to be recovered from borrowers [21].

¹⁷ Includes money paid out under the Small Business Grant Fund [72]

¹⁸ Data current up until October 2021. Figure includes management and performance fees [81].

Data current up until September 2021. Figure Includes management and performance fees of £9.37m (EMA) [84] and £7.83 million (EMA2)[85].

2.2 Government Support Schemes

2.21 Coronavirus Job Retention Scheme (CJRS)

2.211 Introduction

CJRS provided support to businesses by paying up to 80% of a furloughed employee's wage (up to a gross cap of £2,500, but see **Table 2.2**). From 1st July, the scheme changed to allow 'flexible furloughing', which let employers bring workers back on reduced hours and claim for any usual hours not worked. Initially, employers could also claim employer national insurance and pension contributions [13], although this was discontinued from 1st August 2020. Grants were available to all businesses registered for Pay-As-You-Earn, with no limit on funding per employer. Between August and October 2020, the rate of support and employer contributions changed. From 1st September, support was reduced to 70% of employees' wages, which employers were required to top up to 80%. From 1st October, support was reduced to 60% of employees' wages, which, again, employers were required to top up to 80%. In total, there were four iterations of scheme, which ran from 1st March 2020 to 30th September 2021[86] (see **Table 2.2**).

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Table 2.2: Key Elements of Coronavirus Job Retention Scheme 1st March 2020-30th September 2021

	Version 1	Version 2	Version 3	Version 4[86]
Scheme duration	1 Mar-30 Jun 2020	1 July-31 Oct 2020	1 Nov-30 Apr 2021	1 May-30 Sept 2021
Eligibility	Employers with a UK PAYE scheme and UK bank account	Employers with a UK PAYE scheme and UK bank account	Employers with a UK PAYE scheme and UK bank account	Employers with a UK PAYE scheme and UK bank account
Government Contribution (% of wages per employee)	80%	July-Aug 80% Sept 70% Oct 60%	80%	May-June 80% July 70% Aug-Sept 60%
Maximum contribution per month per employee	£2,500	July-Aug £2,500 Sept £2,187.50 Oct £1,875	£2,200	May-June £2,500 July £2,187.50 Aug-Sept £1,875
Required employer contribution	n/a	July-Aug n/a Sept 10% Oct 20%	n/a	May-June n/a July 10% Aug-Sept 20%
Ability to top up employees' wages above the percentage threshold and cap for hours not worked at employers' own expense	Yes	Yes	Yes	Yes
Government contribution relating to employer national insurance & pension contributions	Claimable	July-claimable Sept-Oct Not claimable	Not claimable	Not claimable
Flexi-furlough²⁰	No	Yes	Yes	Yes

The direct beneficiaries of the scheme were furloughed employees who, for the duration of the scheme, were safeguarded from being laid off.²¹ However, the scheme also benefited participating businesses by helping them to avoid the costs associated with redundancies, including redundancy payments, rehiring costs, induction and training costs, higher staff turnover, and lower productivity as a result of reduced staff morale and disengagement of 'survivor' employees.²² Other firms – not so directly affected by lockdowns – also benefited in so far as the scheme supported the purchasing power of workers who might otherwise have lost their jobs.

A total of 11.7m jobs were supported by CJRS at various times from 1.3 million employers, with large businesses (250 or more employees) having the most jobs on furlough over the lifetime of the scheme (3.9 million) [10]. Between March and June 2020, when use of the scheme was at its peak, 61% of eligible employers had put staff on furlough [10]. Use of the scheme varied considerably between different sectors (**Table 2.3**). Over its course, the wholesale and retail sector had the most jobs supported by the scheme, with a total of 2.25 million employments on furlough and the most (1.85 million) on a single day (24th April 2020), although when levels of furlough peaked again between

²⁰ Employees able to work for part of their normal work pattern and be furloughed for other parts of their work.

²¹ In some cases, workers were laid off once companies came out of the scheme. Several companies report paying back the money for these furloughed workers where this happened.

²² In 2009, the Chartered Institute of Personnel and Development estimated that the average direct cost (i.e., not including lower productivity, etc. associated with redundancies) to employers of making redundancies at £16,375 [87].

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November 2020 and January 2021, the accommodation and food services sector had the most employments on furlough [10].²³

Table 2.3: Total Number of Employments on Furlough by Sector

Sector (SIC 2007 section)	Total number of employments on furlough over the course of CJRS
Wholesale and retail; repair of motor vehicles	2,251,900
Accommodation and food services	2,126,100
Manufacturing	1,210,700
Administrative and support services	1,086,900
Construction	871,300
Professional, scientific, and technical	789,400
Arts, entertainment, and recreation	552,100
Health and social work	534,600
Transportation and storage	525,500
Education	422,400
Other service activities	386,200
Information and communication	275,900
Real estate	187,300
Unknown	178,300
Finance and insurance	93,500
Water supply, sewerage, and waste	53,000
Agriculture, forestry, and fishing	48,400
Energy production and supply	22,600
Public administration and defence; social security	19,900
Mining and quarrying	17,200
Households	13,000
Total	11,666,400

Source: HM Revenue and Customs, Coronavirus Job Retention Scheme statistics: 16 December 2021

One in four people who had been employees during the pandemic were on furlough at some point between March 2020 and June 2021 [88]. Jobs on furlough peaked at 8.9 million on 8th May 2020. By 31st October 2020 (the end of the second iteration of the scheme) jobs on furlough had fallen to 2.4 million. From November 2020 the number of furloughed jobs rose again to 5.1 million on 18th January 2021 before decreasing each month until the end of the scheme. When the scheme closed on 30th September 2021 there were still 1.16 million jobs on furlough[10]. Of these, a majority (51%) had an estimated annual pay of £15,000 or less (**Table 2.4**).

²³ The accommodation and food services sector took longer to recover due to slower easing of restrictions on social gatherings. Also of note is the fact that the entertainment and recreation sector had a much wider peak in 2021 compared to many other sectors, reflecting ongoing restrictions on indoor gatherings [10].

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Table 2.4: Employments on Furlough by Estimated Annual Pay at 30th September 2021

Estimated annual pay (employments) ²⁴	Employments on furlough	Eligible employments	Take-up rate
£0 to £5,000	59,500	1,687,500	4%
£5,000 to £10,000	300,200	3,857,300	8%
£10,000 to £15,000	232,900	3,765,600	6%
£15,000 to £20,000	141,500	4,087,100	3%
£20,000 to £25,000	115,600	3,701,200	3%
£25,000 to £30,000	85,700	2,791,200	3%
£30,000 to £35,000	54,700	2,066,100	3%
£35,000 to £40,000	40,000	1,580,100	3%
£40,000 to £45,000	25,200	1,190,100	2%
£45,000 to £50,000	16,500	833,200	2%
£50,000 to £60,000	18,200	1,040,300	2%
£60,000 to £70,000	8,400	570,500	1%
£70,000 to £80,000	5,500	360,300	2%
£80,000 to £90,000	3,600	248,000	1%
£90,000 to £100,000	2,700	180,000	1%
Over £100,000	14,500	728,000	2%
Unknown	34,600	-	-
Total	1,159,300	28,692,200	4%

Source: HM Revenue and Customs, Coronavirus Job Retention Scheme statistics: 16 December 2021

2.212 Participation and Repayment

As the first lockdown and most government support took effect towards the end of the 1st quarter (q1) in 2020, we take the 2nd quarter (q2) in 2020 as the beginning point for each twelve-month period, working back two years to 2018/q2 and forward to 2022/q1. For ease of reading, we refer to these periods as 2018/19, 2019/20 etc.

In 2020/21, 85 FTSE 350 companies participated in CJRS, of these a significant minority either fully (41.2%) or partially (3.5%) repaid the grants received either in the same or following year. In 2021/22, 42 companies participated in the scheme, with 31.0% and 2.4% paying back the grants either fully or partially (**Table 2.5**). In relation to partial repayment, some companies paid back grant money for one year only [89], whilst others repaid grant money for part of the year [90].

²⁴ Estimated annual pay is based on the gross annualised pay over the period April 2019 to March 2020. The data relate to employments and do not necessarily reflect employee where an employee has more than one job [10]. HM Revenue and Customs report that employments in the £0-£10,000 annual pay bands were likely to be part-time employments [10].

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Table 2.5: FTSE 350 Company Participation in CJRS: 2020/21-2021/22

Participation and Repayment	2020/21		2021/22	
	Frequency	Percent	Frequency	Percent
Did not participate	161	65.4	204	82.9
Participated and retained	47	19.1	28	11.4
Participated and repaid	35	14.2	13	5.3
Participated and partially repaid	3	1.2	1	0.4
Total	246	100	246	100

Source: FTSE 350 Company annual reports and accounts, 2020-2022.

In proportionate terms, participation in CJRS by companies in our sample within the FTSE 250 was significantly greater than FTSE 100 companies. However, companies within the FTSE 250 were more likely to make full or partial repayment of grants received under the scheme (**Tables 2.6** and **2.7**).

Table 2.6: FTSE 100 Company Participation in CJRS: 2020-2022

Participation and Repayment	2020/21		2021/22	
	Frequency	Percent	Frequency	Percent
Did not participate	74	79.6	80	79.6
Participated and retained	12	12.9	7	12.9
Participated and repaid	6	6.5	8	6.5
Participated and partially repaid	1	1.1	0	1.1
Total	93	100	93	100

Source: FTSE 100 Company annual reports and accounts, 2020-2022.

Table 2.7: FTSE 250 Company Participation in CJRS: 2020-2022

Participation and Repayment	2020/21		2021/22	
	Frequency	Percent	Frequency	Percent
Did not participate	87	56.9	124	81.0
Participated and retained	35	22.9	21	13.7
Participated and repaid	29	19.0	7	4.6
Participated and partially repaid	2	1.3	1	0.7
Total	153	100	153	100

Source: FTSE 250 Company annual reports and accounts, 2020-2022.

Repayment varied across sectors. **Table 2.8** presents data on repayment of grants received under the scheme in the reporting year ending 31st December 2020²⁵ by industrial sector. Whereas all construction companies (n=7), real estate (n=1), and human health and social work sectors (n=1) repaid grants received under the scheme, no companies in the utilities (n=1), transportation and storage (n=4), accommodation and food services (n=5), administrative and support services (n=6), public administration and defence (n=1), and arts, entertainment and recreation (n=2) sectors did so.

²⁵ Data on repayment for the reporting year ending 31st December 2020 is more likely to be complete.

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Table 2.9: FTSE 350 Company Participation in CJRS by Industrial Sector (Reporting Year Ending 31st December 2020)

	Manufacturing		Utilities		Construction		Retail		Transportation & Storage	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Participated and retained	8	53.3%	1	100.0%	0	0.0%	6	46.2%	4	100.0%
Participated and repaid	5	33.3%	0	0.0%	7	100.0%	7	53.8%	0	0.0%
Participated and partially repaid	2	13.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	15	100.0%	1	100.0%	7	100.0%	13	100.0%	4	100.0%
	Accomm. & Food Services		Information & Communication		Financial & Insurance Activities		Real Estate		Professional, Scientific & Technical Activities	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Participated and retained	5	100.0%	3	33.3%	0	0.0%	0	0.0%	3	37.5%
Participated and repaid	0	0.0%	6	66.7%	1	100.0%	1	100.0%	5	62.5%
Participated and partially repaid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	5	100.0%	9	100.0%	1	100.0%	1	100.0%	8	100.0%
	Administrative & Support Service Activities		Public Administration & Defence; Compulsory Social Security		Human Health & Social Work Activities		Arts, Entertainment & Recreation		All Sectors	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Participated and retained	6	100.0%	1	100.0%	0	0.0%	2	100.0%	39	52.7%
Participated and repaid	0	0.0%	0	0.0%	1	100.0%	0	0.0%	33	44.6%
Participated and partially repaid	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	2.7%
Total	6	100.0%	1	100.0%	1	100.0%	2	100.0%	74	100.0%

Source: FTSE 350 Company annual reports and accounts, 2020-2022.

2.213 Participation, Repayment and Earnings

On average, firms that retained grants received under CJRS generally generated lower earnings (EBITDA) than firms that either fully or partially repaid them (Appendix 2.1, **Tables A2.1, A2.3, A2.5, A2.7**).²⁶ However, the results of independent samples t-tests suggest there is no statistically significant

²⁶ Although the mean EBITDA was invariably greater for companies that repaid CJRS grants. The median EBITDA for 2020/21 and 2021/22 was greater for companies that retained CJRS grants received in 2020/21 (**Table A2.1** and **A2.3**).

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association between full or partial repayment of grants and earnings (Appendix 2.1, **Tables A2.2, A2.4 A2.6, A2.8**).

An analysis of extreme EBITDA values indicates that several companies retained grants under CJRS despite reporting large earnings in 2020/21 and 2021/22 (**Tables 2.10-2.13**). For instance, three companies that retained CJRS grants received in 2020/21 – Associated British Foods (Owners of Primary), Centrica, and FirstGroup – each generated earnings of over £1 billion (**Table 2.10**). In the following year, Associated British Foods and Centrica again each generated earnings over £1 billion, alongside JD Sports Fashion, Rolls-Royce Holdings, Marks and Spencer, and Chertsey-based contract food service company, Compass Group²⁷ (**Table 2.11**).

Table 2.10: Highest and Lowest Reported Earnings (EBITDA) (2020/21): Repayment Status (partially/ fully repaid or retained) of Grants received under the CJRS received in 2020/21

Payment	Highest/ lowest	Company	EBITDA 2020/21 (£)	Amount received under CJRS 2020/21 (£)
Retained	Highest	1 Associated British Foods	£1,821.0m	£57.5m
		2 Centrica	£1,403.0m	£27m
		3 FirstGroup	£1,361.2m	£43.5m
		4 Compass Group	£992.0m	£113.3m
		5 JD Sports Fashion	£948.2m	£61.6m
	Lowest	1 Carnival	-£3,393.0m	Not disclosed ²⁸
		2 Tui	-£1,013.6m	£62.6m
		3 EasyJet	-£396.0m	£116m
		4 Whitbread	-£191.3m	£138.3m
		5 Cineworld Group	-£125.6m	£45.5m
Fully or partially repaid²⁹	Highest	1 CRH	£3,462.7m	Not disclosed ²⁸
		2 Kingfisher	£1,421.0m	£23.0m
		3 DS Smith	£898.0m	Not disclosed ²⁸
		4 Melrose Industries	£859.0m	£91m
		5 B&M European Value Retail	£833.8m	£3.7m
	Lowest	1 Provident Financial	-£13.1m	Not disclosed ²⁸
		2 Crest Nicholson Holdings	£5.3m	£2.5m
		3 Ibstock	£34.8m	£10.5m
		4 Discoverie Group	£43.9m	Not disclosed ²⁸
		5 Marshalls	£45.3m	£9.4m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

²⁷ Data for Compass Group not in Table 2.11 (EBITDA - £1,134.0m; CJRS grant - £113.3m).

²⁸ Either not disclosed or not disaggregated in consolidated or first tier subsidiary financial statements.

²⁹ Does not include companies that repaid only for employees subsequently made redundant.

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Table 2.11: Highest and Lowest Reported Earnings (EBITDA) (2021/22): Repayment Status (partially/ fully repaid or retained) of Grants received under the CJRS received in 2020/21

Payment	Highest/ lowest	Company	EBITDA 2021/22 (£)	Amount received under CJRS 2020/21 (£)
Retained	Highest	1 Associated British Foods	£1,874.0m	£57.5m
		2 JD Sports Fashion	£1,316.7m	£61.6m
		3 Rolls-Royce Holdings	£1,265.0m	£47m
		4 Centrica	£1,228.0m	£27m
		5 Marks and Spencer ³⁰	£1,147.3m	Not disclosed ²⁸
	Lowest	1 Carnival	-£3,494.0m	Not disclosed ²⁸
		2 International Consolidated Airlines Group	-£713.0m	£258m
		3 EasyJet	-£430.0m	£116m
		4 Rank Group	-£10.6m	£28.0m
		5 Wetherspoon (JD)	£13.6m	Not disclosed ²⁸
Fully or partially repaid³¹	Highest	1 CRH	£4,052.7m	Not disclosed ²⁸
		2 Kingfisher	£1,701.0m	£23.0m
		3 Barratt Developments	£831.8m	£26m
		4 DS Smith	£757.0m	Not disclosed ²⁸
		5 Playtech	£729.4m	£1m
	Lowest	1 Discoverie	£46.2m	Not disclosed ²⁸
		2 Kainos Group	£51.1m	Not disclosed ²⁸
		3 Euromoney Institutional Investor	£64.9m	£0.7m
		4 Oxford Instruments	£67.2m	£0.4m
		5 Crest Nicholson Holdings	£97.2m	£2.5m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

³⁰ In the period leading up to the pandemic Marks and Spencer's financial year ended in late March. In 2021 and 2022 its financial year ended 3rd April and 2nd April respectively. In Table 2.11 we took EBITDA data from the company's 2022 financial statements (the comparable data for the preceding year was £710.0m).

³¹ Does not include companies that repaid only for employees subsequently made redundant.

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Similarly, several companies retaining grants received under CJRS in 2021/22 – notably FirstGroup, Rolls-Royce Holdings, and Next – each reported EBITDA over £1,000 million in either 2020/21 (**Table 2.12**) or 2021/22 (**Table 2.13**).

Table 2.12: Highest and Lowest Reported Earnings (EBITDA) (2020/21): Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2021/22

Payment	Highest/ lowest	Company	EBITDA 2020/21 (£)	Amount received under CJRS 2021/22 (£)
Retained	Highest	1 FirstGroup	£1,361.2m	£8.8m
		2 Next	£723.4m	£16.2m
		3 Rentokil Initial	£605.2m	£1.0m
		4 Frasers Group	£586.5m	£80.0m
		5 Rolls-Royce Holdings	£374.0m	£11.0m
	Lowest	1 Carnival	-£3,393.0m	Not disclosed ²⁸
		2 Tui	-£1013.6m	£79.4m
		3 EasyJet	-£396.0m	£111m
		4 Whitbread	-£191.3m	£61.7m
		5 Cineworld Group	-£125.6m	£27.6m
Fully or partially repaid³²	Highest	1 Associated British Foods	£1,821.0m	£70.7m
		2 Compass Group	£992.0m	Not disclosed ²⁸
		3 JD Sports Fashion	£948.2m	£24.4m
		4 Entain	£909.5m	£44m
	Lowest	1 Renishaw	£76.2m	£1.9m
		2 Greggs	£110.9m	£14.9m
		3 Watches of Switzerland	£111.8m	£6.8m
		4 Wood Group	£273.8m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

³² Does not include companies that repaid only for employees subsequently made redundant.

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Table 2.13: Highest and Lowest Reported Earnings (EBITDA) (2021/22): Repayment Status (partially/ fully repaid or retained) of Grants received under the CJRS received in 2021/22

Payment	Highest/ lowest	Company	EBITDA 2021/22 (£)	Amount received under CJRS 2021/22 (£)
Retained	Highest	1 Rolls-Royce Holdings	£1,265.0m	£11.0m
		2 Next	£1,123.7m	£16.2m
		3 FirstGroup	£910.0m	£8.8m
		4 Rentokil Initial	£644.4m	£1m
		5 Whitbread	£575.5m	£11.0m
	Lowest	1 Carnival	-£3,494.0m	Not disclosed ²⁸
		2 International Consolidated Airlines Group	-£713.0m	£190m
		3 EasyJet	-£430.0m	£111m
		4 Rank Group	-£10.6m	£64.1m
		5 Wetherspoon (JD)	£13.6m	Not disclosed ²⁸
Fully or partially repaid ³³	Highest	1 Associated British Foods	£1,874.0m	£70.7m
		2 JD Sports Fashion	£1,316.7m	£24.4m
		3 Compass Group	£1,134.0m	Not disclosed ²⁸
		4 Entain	£726.1m	£44m
	Lowest	1 Watches of Switzerland Group	£152.3m	£6.8m
		2 Renishaw	£178.4m	£1.9m
		3 Greggs	258.7m	£14.9m
		4 Wood Group	£268.2m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

2.214 Participation, Repayment and Dividend Payments

On average, firms that retained grants under CJRS made lower dividend payments than firms which either fully or partially repaid CJRS grants (Appendix 2.2, **Tables A2.9, A2.11, A2.13, A2.15**).³⁴ However, the results of independent samples t-tests and Mann-Whitney U Tests suggest there was – save for one exception³⁵ – no significant association between repayment of grants and dividend payments (Appendix 2.2, **Tables A2.10, A2.12, A2.14, A2.16**).

Despite this, several companies which retained money under the scheme made relatively large dividend payments. **Tables 2.14** and **2.15** present the highest dividend payments in 2020/21 and 2021/22 at companies that either retained and repaid grants received under CJRS in 2020/21.³⁶ The

³³ Does not include companies that repaid only for employees subsequently made redundant.

³⁴ Save with one exception. On average companies that retained grants under the CJRS received in 2021/22 made higher dividend pay-outs to shareholders in 2021/22 than companies that either fully or partially repaid grants (**Table A2.15**).

³⁵ A Mann-Whitney U Test suggests that dividend payments by companies in 2021/22 that repaid CJRS grants received in 2020/21 were statistically greater than dividend payments by companies that retained grants received under CJRS for that year (**Table A2.12**).

³⁶ At least 18 companies that retained grants under CJRS received in 2020/21 made dividend payments in 2020/21, 15 in the following year. At least 6 companies that retained grants under CJRS received in 2021/22 made dividends payments in 2021/22. In practice, the numbers may be higher (particularly in relation to dividends paid in 2021/22) due to missing data in the FAME dataset.

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data show that seven companies retaining grants under the scheme paid out more than £100m in dividends each in either 2020/21 or 2022/21.^{37 38}

Table 2.14: Highest Dividend Payments to Shareholders (2020/21): Repayment Status (partially/ fully repaid or retained) of Grants received under the CJRS received in 2020/21

Payment	Highest/ lowest	Company	Dividend 2020/21 (£)	Amount received under CJRS 2020/21 (£)
Retained	Highest	1 Compass Group	£427.0m	£113.3m
		2 Tui	£288.7m	£62.6m
		3 Associated British Foods	£271.0m	£57.5m
		4 EasyJet	£174.0m	£116m
		5 Hays	£121.6m	£2.3m
Fully or partially repaid³⁹	Highest	1 B&M European Value Retail	£547.4m	£3.7m
		2 CRH	£531.3m	Not disclosed ²⁸
		3 Barratt Developments	£373.2m	£26m
		4 DS Smith	£222.0m	Not disclosed ²⁸
		5 DCC	£143.7m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

Table 2.15: Highest Dividend Payments to Shareholders (2021/22): Repayment Status (partially/ fully repaid or retained) of Grants received under the CJRS received in 2020/21

Payment	Highest/ lowest	Company	Dividend 2021/22 (£)	Amount received under CJRS 2020/21 (£)
Retained	Highest	1 Next	£344.5m	£95.1m
		2 Rentokil Initial	£138.7m	£14.2m
		3 Grafton Group	£85.2m	£19.6m
		4 IMI	£61.8m	£0.43m
		5 Inchcape	£52.2m	£19.9m
Fully or partially repaid⁴⁰	Highest	1 Taylor Wimpey	£301.5m	Not disclosed ²⁸
		2 Howden Joinery Group	£133.6m	£22m
		3 Travis Perkins	£105.4m	£39.1m
		4 PageGroup	£100.2m	£3.4m
		5 Vistry Group	£88.7m	£7.1m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

³⁷ The company which received money under CJRS in 2020/21 paying out the next highest amount in dividends in 2020/21 was IMI PLC (£91.6m).

³⁸ Taking into account missing data in the FAME dataset, the number may be higher, particularly in relation to dividends paid in 2021/22.

³⁹ Does not include companies that repaid only for employees they subsequently made redundant.

⁴⁰ Does not include companies that repaid only for employees subsequently made redundant.

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Tables 2.16 and 2.17 present the highest dividend payments to companies in 2020/21 and 2021/22 that retained and repaid grants received under CJRS in 2021/22. The data show that 4 companies retaining grants under the scheme paid out more than £100m in dividends each in either 2020/21 or 2022/21.

Table 2.16: Highest Dividend Payments to Shareholders (2020/21): Repayment Status (partially/ fully repaid or retained) of Grants received under the CJRS received in 2021/22

Payment	Highest/ lowest	Company	Dividend 2020/21 (£)	Amount received under CJRS 2021/22 (£)
Retained	Highest	1 Tui	£288.7m	£79.4m
		2 EasyJet	£174.0m	£111m
		3 WH Smith	£47.0m	£11m
		4 Cineworld Group	£37.6m	£27.6m
		5 Rank Group	£32.4m	£64.1m
Fully or partially repaid⁴¹	Highest	1 Compass Group	£427.0m	Not disclosed ²⁸
		2 Associated British Foods	£271.0m	£70.7m
		3 Currys	£78.0m	£73.0m
		4 Renishaw	£33.5m	£1.9m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

Table 2.17: Highest Dividend Payments to Shareholders (2021/22): Repayment Status (partially/ fully repaid or retained) of Grants received under the CJRS received in 2021/22

Payment	Highest/ lowest	Company	Dividend 2021/22 (£)	Amount received under CJRS 2021/22 (£)
Retained	Highest	1 Next	£344.5m	£16.2m
		2 Rentokil Initial	£138.7m	£1m
		3 Mitie Group	£5.7m	£9.5m
		4 Rolls Royce Holdings	£1.0m	£11.0m
Fully or partially repaid⁴²	Highest	1 Associated British Foods	£49.0m	£70.7m
		2 Greggs	£15.3m	£14.9m
		3 JD Sports Fashion	£14.9m	£24.4m
		4 Renishaw	£10.2m	£1.9m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

2.215 Participation, Repayment and Executive Pay

On average, the drop in total executive (CEO and CFO) pay between 2019/20 and 2020/21 was greater at companies that retained grants received under CJRS in 2020/21 (mean, -18.7%; median, -32.8%), compared to those at companies which repaid them (mean -16.1%; median, -29.5%) (Table A2.17). Likewise, the percentage increase in total executive pay in the following year (2020/21-2021/22) was lower at companies that retained grants (mean, 66.8%; median, 45.6%) received under CJRS in 2020/21 compared to those that repaid them (mean 101.1%; median, 77.2%) (Table A2.18).

⁴¹ Does not include companies that repaid only for employees subsequently made redundant.

⁴² Does not include companies that repaid grant income only for employees subsequently made redundant.

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Nonetheless, **Tables 2.18** and **2.19** illustrate large percentage changes in executive pay for 2019/20-2020/21 and 2020/21-2021/22 at several companies which retained CJRS grants received in 2020/21 – notably Watches of Switzerland Group, Reach, FirstGroup, ITV, Rolls-Royce Holdings, Greggs, and Associated British Foods.

Table 2.18: Highest and Lowest Percentage Change in Total CEO and CFO Remuneration (2019/20-2020/21): Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2020/21

	Highest / lowest	Company	Percentage Change in CEO & CFO Pay 2019/20-2020/21 (%)	Change in Executive Pay 2019/20-2020/21 (£)	Amount received under CJRS 2020/21 (£)
Retained	Highest	1 Watches of Switzerland Group	352.5%	£5.39m	£2.6m
		2 Reach	319.3%	£5.70m	£6.8m
		3 Marks and Spencer	81.6%	£1.36m	Not disclosed ²⁸
		4 Aston Martin Lagonda Global Holdings	31.7%	£0.59m	£13m
		5 Redde Northgate	22.6%	£0.35m	£1.8m
	Lowest	1 SSP Group	-84.2%	−£6.63m	£43.6m ⁴³
		2 WH Smith	-75.7%	−£4.50m	£22.0m
		3 National Express Group	-73.3%	−£3.31m	£27.1m
		4 Associated British Foods	-73.3%	−£5.19m	£57.5m
		5 Greggs	-71.0%	−£2.48m	£87.0m
Fully or partially repaid	Highest	1 B&M European Value Retail	178.5%	£3.44m	£3.7m
		2 Synthomer	102.1%	£1.47m	£0.4m
		3 Kingfisher	79.3%	£1.17m	£23.0m
		4 Rotork	41.4%	£1.04m	Not disclosed ²⁸
		5 Mitie Group	33.5%	£0.83m	£49.7m
	Lowest	1 Auto Trader Group	-67.7%	−£1.73m	Not disclosed ²⁸
		2 PageGroup	-67.6%	−£3.79m	£3.4m
		3 Redrow	-64.1%	−£2.11m	Not disclosed ²⁸
		4 Taylor Wimpey	-63.7%	−£2.90m	Not disclosed ²⁸
		5 Barratt Developments	-61.5%	−£3.04m	£26.0m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

⁴³ SSP subsidiaries Rail Gourmet UK Ltd. and Select Service Partner UK Ltd. reported grants under CJRS in 2020/21 for £5.3m and £38.3m respectively.

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Table 2.19: Highest and Lowest Percentage Change in Executive Remuneration (2020/21-2021/22): Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2020/21

	Highest / lowest	Company	Percentage Change in Executive Pay 2020/21-2021/22 (%)	Change in CEO & CFO Pay 2020/21-2021/22 (£)	Amount received under CJRS 2020/21 (£)
Retained	Highest	1 FirstGroup	230.8%	£3.10m	£43.5m
		2 ITV	218.5%	£3.97m	Not disclosed ²⁸
		3 Rolls-Royce Holdings	207.1%	£3.94m	£47.0m
		4 Greggs	198.6%	£2.02m	£87.0m
		5 Associated British Foods	197.4%	£3.73m	£57.5m
	Lowest	1 Reach	-88.2%	-£6.59m	£6.8m
		2 Watches of Switzerland Group	-72.1%	-£4.99m	£2.6m
		3 C&C Group	-63.2%	-£1.80m	£21.9m
		4 Aston Martin Lagonda Global Holdings	-36.7%	-£0.89m	£13m
		5 JD Sports Fashion	-36.0%	-£2.12m	£61.6m
Fully or partially repaid	Highest	1 Dunelm Group	347.5%	£5.06m	£14.5m
		2 Playtech	334.6%	£8.17m	£1.0m
		3 Howden Joinery Group	258.7%	£3.65m	£22.0m
		4 Barratt Developments	216.5%	£4.12m	£26.0m
		5 Travis Perkins	208.2%	£5.01m	£39.1m
	Lowest	1 Rotork	-41.3%	-£1.47m	Not disclosed ²⁸
		2 Serco Group	-27.5%	-£2.13m	£2.0m
		3 TI Fluid Systems	-18.9%	-£0.92m	Not disclosed ²⁸
		4 Oxford Instruments	-17.3%	-£0.79m	£0.4m
		5 Marshalls	-10.8%	-£0.30m	£9.4m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

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A similar pattern is apparent in relation to grants received under CJRS in 2021/22, with the percentage change in total executive pay between 2020/21 and 2021/22 lower at companies that retained CJRS grants (mean, 45.9%; median, 27.5%) compared to executive pay at companies that repaid CJRS grants (mean, 102.6%; median, 140.9%) (Table A2.19). Despite this, there were several large percentage increases in total executive pay at companies that retained CJRS grants – notably at FirstGroup, Rolls-Royce, Babcock International, and InterContinental Hotels Group, and Cineworld Group (Table 2.20).

Table 2.20: Highest and Lowest Percentage Change in CEO & CFO Remuneration (2020/21-2021/22): Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2021/22

	Highest / lowest	Company	Percentage Change in CEO & CFO Remuneration 2020/21-2021/22 (%)	Change in CEO & CFO Remuneration 2020/21-2021/22 (£)	Amount received under CJRS 2021/22 (£)
Retained	Highest	1 FirstGroup	230.8%	£3.10m	£8.8m
		2 Rolls-Royce Holdings	207.1%	£3.94m	£11m
		3 Babcock International Group	147.1%	£1.95m	Not disclosed ²⁸
		4 InterContinental Hotels Group	115.6%	£2.95m	£3.1m
		5 Cineworld Group	72.6%	£0.94m	£27.6m
	Lowest	1 C&C Group	-63.2%	£-1.80m	£2.9m
		2 International Consolidated Airlines Group	-29.1%	£-0.46m	£190.0m
		3 Tui	-14.4%	£-0.34m	£79.4m
		4 Redde Northgate	4.2%	£0.08m	£17.2m
		5 Wetherspoon (JD)	10.7%	0.11m	Not disclosed ²⁸
Fully or partially repaid	Highest	1 Greggs	198.6%	£2.02m	£14.9m
		2 Associated British Foods	197.4%	£3.73m	£70.7m
		3 Currys	196.9%	£3.09m	£73.0m
		4 Entain	177.6%	£4.30m	£44.0m
	Lowest	1 Watches of Switzerland Group	-72.1%	£-4.99m	£6.8m
		2 JD Sports Fashion	-36.0%	£-2.12m	£24.4m
		3 Wood Group (John)	3.5%	£0.07m	Not disclosed ²⁸
		4 Renishaw	140.9%	£1.52m	£1.9m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

Turning to percentage changes in total executive pay between the period immediately prior to the imposition of pandemic-related restrictions and the year following the peak of the economic disruption caused by the pandemic (2019/20-2021/22), for companies retaining grants received under the CJRS in 2020/21, the percentage change was lower for companies that retained the grants (mean, 5.7%; median, -7.5%) compared to those that repaid them (mean, 45.9%; median, 35.9%) (Table

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A2.20). For companies receiving grants under the scheme in 2021/22, the percentage change in total executive pay was again lower at companies that retained them (mean, 0.4%; median, -8.9%) compared with those that repaid them (mean, 17.0%; median, -1.4%) (**Table A2.21**).

However, results of hierarchical multiple regression controlling for percentage changes in EBITDA and market capitalisation suggest that whether companies paid back grants received under CJRS in either 2020/21 or 2021/22 had no statistically significant effect on the percentage change in executive pay between the year immediately prior to the introduction of pandemic-related restrictions (2019/20) and the year following the peak of the economic disruption caused by the pandemic (**Tables A2.22-A2.27**). This finding is consistent with some significant increases in total executive pay at companies that retained grants under CJRS – notably at FirstGroup, Renishaw, Marks and Spencer, Volution Group, Currys, and Mitie Group (**Tables 2.21 and Table 2.22**)

Table 2.21: Highest and Lowest Percentage Change in CEO & CFO Remuneration (2019/20-2021/22): Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2020/21

	Highest / lowest	Company	Percentage Change in CEO & CFO Remuneration 2019/20-2021/22 (%)	Change in CEO & CFO Remuneration 2019/2020-2021/22 (£)	Amount received under CJRS 2020/21 (£)
Retained	Highest	1 FirstGroup	260.0%	£3.21m	£43.5m
		2 Renishaw	127.4%	£1.46m	Not disclosed ²⁸
		3 Marks and Spencer	169.9%	£2.82m	Not disclosed ²⁸
		4 Volution Group	100.8%	£1.53m	£2.8m
		5 Currys	99.4%	£2.32m	£17.0m
	Lowest	1 SSP Group	-80.1%	−£6.31m	c.43.6m
		2 International Consolidated Airlines Group	-77.0%	−£3.72m	£258.0m
		3 C&C Group	-73.1%	−£2.85m	£21.9m
		4 Mitchells & Butlers	-65.3%	−£2.17m	£165.0m
		5 WH Smith	-64.6%	−£3.84m	£22.0m
Fully or partially repaid	Highest	1 B&M European Value Retail	225.9%	£4.35m	£3.7m
		2 Playtech	205.0%	£7.13m	£1.0m
		3 Dunelm Group	198.0%	£4.33m	£14.5m
		4 Kingfisher	178.9%	£2.64m	£23.0m
		5 Synthomer	154.9%	£2.23m	£0.4m
	Lowest	1 Redrow	-39.4%	−£1.30m	Not disclosed ²⁸
		2 Marshalls	-32.3%	−£1.18m	£9.4m
		3 Serco Group	-30.0%	−£2.40m	£2.0m
		4 PageGroup	-29.1%	−£1.63m	£3.4m
		5 Rightmove	-27.9%	−£1.04m	£0.8m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

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Table 2.22: Highest and Lowest Percentage Change in CEO & CFO Remuneration (2019/20-2021/22): Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2021/22

	Highest / lowest	Company	Percentage Change in CEO & CFO Remuneration 2019/20-2021/22 (%)	Change in CEO & CFO Remuneration 2019/20-2021/22 (£)	Amount received under CJRS 2021/22 (£)
Retained	Highest	1 FirstGroup	260.0%	£3.21m	£8.8m
		2 Mitie Group	91.2%	£2.27m	£9.5m
		3 Babcock International Group	60.0%	£1.23m	Not disclosed ²⁸
		4 Rank Group	55.5%	£0.42m	£64.1m
		5 Capita	41.2%	£0.65m	£4.9m
	Lowest	1 SSP Group	-80.1%	£-6.31m	c.25.9m
		2 International Consolidated Airlines Group	-77.0%	£-3.72m	£190.0m
		3 C&C Group	-73.1%	£-2.85m	£2.9m
		4 Mitchells & Butlers	-65.3%	£-2.17m	£210.0m
		5 WH Smith	-64.6%	£-3.84m	£11.0m
Fully or partially repaid	Highest	1 Renishaw	127.4%	£1.46m	£1.9m
		2 Curry's	99.4%	£2.32m	£73.0m
		3 Watches of Switzerland Group	26.5%	£0.41m	£6.8m
		4 Entain	24.1%	£1.31m	£44.0m
	Lowest	1 JD Sports Fashion	-41.8%	£-2.69m	24,400
		2 Wood Group (John)	-24.4%	£-0.66m	Not disclosed ²⁸
		3 Associated British Foods	-20.6%	£-1.46m	£70.7m
		4 Compass Group	-14.3%	£-0.86m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

2.22 Government Loan Schemes

2.221 Overview

In 2020-21, the Department for Business, Energy and Industry Strategy (BEIS) guaranteed £79.31 billion of loans to companies under three major lending programmes. The schemes catered for businesses of different sizes which had been ‘adversely affected’ by the pandemic, with applicants self-certifying to this effect (**Table 2.23**) [21]. The Bounce Bank Loan Scheme (BBL) was the largest of the three schemes, offering loans to all businesses of up to £50,000 or a maximum of 25% of annual turnover [91]. The loans had a fixed interest rate of 2.5%, a maximum length of ten years, carried no lender-levied fees, and were 100% backed by the government (**Table 2.23**) [92]. The Coronavirus Business Interruption Loan Scheme (CBILS) provided financial support to small and medium-sized businesses with an annual revenue under £45 million. Businesses could access up to £5 million of support, with the government guaranteeing 80% of the sums advanced (**Table 2.23**). Interest rates on loans were determined by lenders. The Coronavirus Large Business Interruption Loan Scheme (CLBILS) provided financial assistance for businesses with an annual turnover of over £45 million. Businesses could access up to £200 million of support or 25% of their annual turnover, whichever was lower, with the government guaranteeing 80% of the sums advanced (**Table 2.23**).

All three schemes were managed by the British Business Bank (BBB) on behalf of BEIS, with loans delivered through commercial lenders accredited by BBB. Accredited lenders were and continue to be responsible for administering loan repayments and pursuing borrowers for missed repayments for up to 12 months after the issue of a formal demand. Term periods across the schemes varies (**Table 2.23**). [91] In addition to government guarantees, HM Treasury covered the costs of lender fees for CBILS loans and interest payments due for the first twelve months of loans for both CBILS and BBL [21]. The subsidy element to large firms participating in CLBILS primarily depends on whether loans were provided at an interest rate or with credit terms more favourable than would otherwise be available on the private market. Lenders paid the government a fee in respect of each facility based on the principal amount of the facility multiplied by a margin of between £50 and £100 depending on the term of the facility. Where the lender extended the facility to the maximum six-year term (**Table 2.23**), the applicable margin was £200 from years four to six. BBB reported that it is expected that the fees would be reflected in the overall borrowing costs incurred by the borrower [93]. Further, loans were made on commercial terms and at the discretion of accredited lenders. However, BBB also noted that because lenders benefited from the reduced risk on their facility (as well as from the capital relief they may receive on CLBILS facilities): a) the resulting savings to the lender should be passed on to the borrower through a proportionate reduction in pricing; b) the interest rate the lender could charge (after taking into account scheme costs) should be reduced as a result of the CLBILS guarantee [93]. Although the last point was described as an ‘expectation’ only [93], BBB has indicated that existence of a loan guarantee enabled large firms to borrow more cheaply than would otherwise have been the case.⁴⁴ The schemes closed at the end of March 2021 and were replaced by the Recovery Loan Scheme, which closed in June 2022.

⁴⁴ In UK guidance for calculating the amount of subsidy in countervailing duty investigations, the benefit conferred is assessed as the difference between the cost of the loan with the guarantee and loans available through a comparable commercial lender without a guarantee. Fees associated with accessing the loan are then deducted from the total benefit.

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HM Treasury and Bank of England also set up a joint lending facility, the Covid Corporate Financing Facility (CCFF), to support liquidity among the UK's largest firms through the purchase of short-term debt in the form of commercial paper – an unsecured, short-term debt instrument issued by a company. The scheme – available to firms regarded as making a material contribution to the UK economy⁴⁵ and subject to limited sector restrictions⁴⁶ – offered financing on terms comparable to those prevailing in markets in the period prior to the economic disruption caused by COVID-19, purchasing securities at a spread above a reference rate based on the current sterling overnight index swap rate [94, 95].⁴⁷ The benefit to companies participating in the CCFF equalled the difference between the amount of interest paid on the government loan and the interest normally payable on a comparable commercial loan (payable on private market). The CCFF closed to new purchases on 23rd March 2021. Final repayments under the scheme were made on 18th March 2022. In total, £37 billion was lent to 107 different companies under the scheme with a peak issuance of £20.5 billion (May 2020) [95].

⁴⁵ CCFF was available to: UK incorporated companies (including a finance subsidiary, although a guarantee was required from the parent or primary entity in the group), including those with foreign-incorporated parents and with a genuine business in the UK; companies with significant employment in the UK; companies with their headquarters in the UK; companies which generated significant revenues, served a large number of customers, or had a number of operating sites in the UK.

⁴⁶ The scheme was not open to public bodies, banks, building societies, insurance companies, or financial sector entities regulated by the Bank of England or the Financial Conduct Authority, leveraged investment vehicles companies within groups, or LLPs within groups which were predominantly active in businesses subject to financial sector regulation [94].

⁴⁷ Spreads were set so that pricing was close to the market spreads prevailing before the economic disruption caused by COVID-19 [94].

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Table 2.23: Summary of Government Loan Guarantee Schemes[21]

	Bounce Back Loan Scheme	Coronavirus Business Interruption Loan Scheme (CBILS)	Coronavirus Large Business Interruption Loan Scheme (CLBILS)
Scheme duration	4 May 20-31 Mar 21	23 Mar 20-31 Mar 21	20 Apr 20-31 Mar 21
Eligibility	No business size restrictions. Not building societies, insurance companies, public sector organisations. Businesses self-certified not a 'business in difficulty' on 31 Dec 2019 not bankrupt in liquidation or in a similar situation	Max turnover £45 million. Not building societies, insurance companies, public sector organisations Lender must consider borrowing proposal viable under normal circumstances	Min. turnover £45 million. Not building societies, insurance companies, public sector organisations Lender must consider borrowing proposal viable under normal circumstances
Type of Finance	Term loans	Term loans, overdrafts, invoice finance, and asset finance	Term loans, overdrafts, invoice finance, and asset finance
Guarantee	100%	80%	80%
Use of proceeds	Businesses self-certified that loan would be used to provide economic benefit to the business, and not for personal purposes.	Lenders checked that the loan is for a suitable business purpose.	Applicants provided a 'borrowing proposal' for which lenders believe the finance will enable the business to trade out of any short-to medium-term difficulty. Companies borrowing >£50 million subject to further restrictions on dividend payments, senior pay and share repurchases.
Highest Maximum amount per borrower	£50,000 (up to 25% of turnover)	£5 million	£200 million
Interest rate and fees	2.5% fixed per annum. Government paid first year of interest. No fees.	Interest rate varied by lender. Government paid first year of interest and first year of fees. No 'guarantee fee' for SMEs.	Interest rate varied by lender.
Repayment period	6 years, extendable to 10 years at borrower discretion under 'Pay As You Grow' option.	6 years, extendable to up to 10 years for forbearance purposes in line with usual lender forbearance policy.	3 years, extendable to up to 6 years for forbearance purposes in line with usual lender forbearance policy.
Outstanding total drawn by borrowers (31 Mar 2021)	£46.015 billion	£21.356 billion	£4.263 billion
Estimated Guarantee liability (31 Mar 2021)	£17.222 billion	£2.194 billion	£357 million

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2.222 Economic and Competitive Value of BBLS, CBILS, and CLBILS to UK Banks

The value of lending under BBLS, CBILS and CLBILS has been significant. Around one quarter of all UK businesses received a Bounce Back Loan (1.53 million facilities) [22, 91]. Loans totalling £26.39 billion (98,344 facilities) and £5.56 billion (716 facilities) were approved under CBILS and CLBILS respectively [21, 91]. The cost to the Treasury of lender fees and interest payments due for the first twelve months on loans under BBLS and BBLS alone was £1.5 billion (£832 million and £701 million respectively) [21].

In value terms, lending under the schemes was dominated by the UK's major banks. Lloyds, NatWest, HSBC, and Barclays alone approved loans under the schemes with a combined value of £12.4 billion, £14.1 billion, £12.3 billion, and £12.2 billion respectively [96-100]. Most loans under BBLS – more than 90%, or £39.7 billion – went to micro-businesses (those with an a turnover below £632,000) [22]. The scheme's low interest rate made it uneconomical for some smaller lenders to participate, which meant that larger lenders who were among the first to be accredited under the scheme, were able to increase their market share of SME lending significantly. The seven main UK banks provided 90% of the total value of loans, which, according to the House of Commons Public Accounts Committee, distorted competition in the SME lending market [30]. In its 2020 annual report, Barclays noted that lending under BBLS and CBILS (£11.3 billion) for the reporting year ending 31st December was equivalent to four years of traditional lending volumes, condensed into less than 12 months. This represented a 'significant number of new customers', providing the bank with 'an opportunity to establish long-lasting relationships for the future' [101]. Equally, in its 2020 annual report, Santander subsidiary, TSB, reported that its 'potential for growth had been particularly significant in its lending to SMEs', which was reflected in an increase in business banking of £584.1 million, primarily due to lending through BBLS [102].

In addition to their macro-economic stabilisation effects [103], which has brought big benefits to banks, an important effect of BBLS and CBILS, as such, has been to allow banks to profit from new streams of interest payments,⁴⁸ whilst passing the risks on to government and the borrowing public [5, 105]. More generally, loans under government loan schemes – which attract a lower risk weighting – moderate the impact of a growing loan book on retained capital requirements under the Basel Framework, which are closely tied to risk weighted assets [106].⁴⁹ Close Brothers' 2021 annual report, for instance, noted that risk weighted assets increased modestly by 3% to £9.1 billion notwithstanding a 10.9% growth in its loan book, given the significant portion of government guaranteed loans under CBILS [107]. All things being equal, this will give banks greater freedom over capital distributions to shareholders moving forward.

In terms of ongoing risks to the public, the sums involved are significant. BEIS's 2021 annual report estimated the government's liability under all three schemes – i.e. the amount the government expects to pay to commercial lenders where borrowers default on loans – at £19.83 billion [21]. This breaks down as £17,222 billion (estimated range between 31% and 48% of loans) under BBLS, £2.19

⁴⁸ Interest rates charged under CBILS and CLBILS vary by lender but appear to be close to (see above) or at market rates. HSCS's 2020 annual report suggests that interest on loans under CBILS is charged between 3.49 and 3.99% above the UK base rate [104].

⁴⁹ In addition, evidence from banking in the Eurozone suggests that guaranteed loans partially substituted for pre-existing, non-guaranteed credit [105].

billion under CBILS, and £357 million under CLBILS [21, 91].⁵⁰ The larger estimated liability for BBL relative to CBILS and CLBILS is due to several factors: the fact that the value of loans made under the scheme was greater; the fact that there was no requirement on lenders to conduct credit and affordability checks before making loans;⁵¹⁵² the characteristics of borrowers; and the fact that BBL covers 100% of lenders' losses, as opposed to 80% in the case of CBILS and CLBILS, which means that there are limited commercial incentives for lenders to pursue borrowers for more than the minimum period under scheme rules [30]. In practice, lenders are not expected to continue to pursue borrowers after twelve months and can claim on the government guarantee before the end of the twelve month period if they have conducted what they consider to be a 'sufficient and robust level of recoveries' and have concluded that no further payment is likely [22, 30].

2.23 Expanded Retail Discount (Business Rates Relief)

Reductions in business rates for retail businesses (Business Rates Retail Discount) were originally announced in the October 2018 Budget to help them compete with online retailers. The discount was initially set at one-third off business rates bills for properties with a rateable value of up to £51,000 and was initially intended to be in place from April 2019 to March 2021. In the March 2020 Budget, the discount was increased to 100% and extended to include the leisure and hospitality sectors [108, 109]. The relief applied to occupied retail, leisure, and hospitality properties in 2020/21. There was no rateable value limit on the relief.⁵³ Eligible businesses were entitled to: 100% off business rates bills for 2020/21; 100% off business rates bills for the first 3 months of 2021/2022; 66% off business rates bills for the remainder of 2021/2022 up to a total value of £2 million. If businesses were legally allowed to open during the national lockdown starting 5th January 2021, the discount for 1st July 2021 to 31st March 2022 was capped at £105,000 (rather than £2 million). Businesses occupying more than one property were entitled to relief on each of their eligible properties. The retail discount could be claimed on top of any other Business Rates Relief [108, 109]. Similar schemes operated in Scotland, Wales and Northern Ireland with modest differences. Wales, for instance, imposed a limit on the rateable value of relief.

In contrast to many other forms of government support, Business Rates Relief were highly politicised. Essential retailers – such the large supermarkets – who were able to stay open during the pandemic came under pressure in the media to forego the relief [110]. This caused several large companies to forego the relief (see below). Further, the relief when originally announced excluded betting shops,

⁵⁰ Of this, £4.9 billion is estimated to arise through fraud, where loans were issued to ineligible businesses [21]. This large estimate is due to several factors. These are outline in a recent report of the House of Commons Committee of Public Accounts. Among other things, it took a month after the Scheme's launch to set up checks to prevent duplicate applications because of delays in joining up information held by different parties [30]. In addition, the Scheme did not require lenders to check a businesses' claimed turnover against its records for existing customers. The Committee has reported that it took BEIS eight months to introduce checks to ensure businesses' claimed turnover was correct, by which time 93% of the loans by value had been issued [30].

⁵¹ In its 2021 Annual Report, Barclays reports that where it had assessed BBL loan exposure to have not met strict assessment criteria, no claim had been made against the government guarantee. This resulted in an impairment allowance against these loans of £16m at the year-end [99].

⁵² In contrast to the BBL, lenders were able to perform more checks before loans under the CBILS were issued [21].

⁵³ There was some variation between schemes among the home nations. The Welsh scheme, for example, was limited to properties with a rateable value of £500,000 or less.

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casinos and gambling clubs.⁵⁴ Major gambling companies – including Flutter Entertainment and Entain (formerly GVC) – issued warnings of large reductions in EBITDA if sporting events were suspended as a result of the pandemic [111, 112]. After a brief, intense period of lobbying [113], the exclusion was lifted [108].

2.231 FTSE 350 Companies, Participation and Repayment

In our sample, 38 companies took advantage of the relief, 9 in one reporting year only, and 29 across two or three reporting years. Eighteen companies received and retained Business Rates Relief in 2020/21 and 16 in 2021/22. A significant minority either fully or partially repaid the relief – 37.9% in 2020/21 and 36.0% in 2021/22⁵⁵ (**Table 2.24**). In relation to partial repayment, some companies paid back grant money for one year only, whilst others repaid grant money for part of the year. Next, for example, reported paying back £29m in Business Rates Relief in 2021/22 for the period in which its stores were open [114].

Table 2.24: FTSE 350 Company use of Business Rates Relief: 2020/21-2021/22

Participation and Repayment	2020/21		2021/22	
	Frequency	Percent	Frequency	Percent
Ineligible	217	88.2	217	89.7
Participated and retained	18	7.3	16	6.6
Participated and repaid or passed up in full	10	4.1	8	3.3
Participated and partially repaid	1	0.4	1	0.4
Total	246	100	242	100

Source: FTSE 350 Company annual reports and accounts, 2020-2022.

2.232 FTSE 350 Companies, Business Rates Relief, Repayment and Earnings

On average, firms that retained Business Rates Relief received in 2020/21 generated lower earnings (EBITDA) in both 2020/21 and 2021/22 than firms which either fully or partially repaid the relief (Appendix 2.2, **Tables A2.28, A2.30**). Similarly, firms that retained Business Rates Relief received in 2021/22 also generated lower earnings in both 2020/21 and 2021/22 than firms that either fully or partially repaid the relief (Appendix 2.2, **Tables A2.32, A2.34**). However, independent samples t-tests and Mann-Whitney U tests suggest there was generally no statistically significant association between full or partial repayment of relief received in 2020/21 and earnings in 2020/21 and 2021/22 and relief received in 2021/22 and earnings in 2021/22 (Appendix 2.2, **Tables A2.29, A2.31, A2.35**). A Mann-Whitney U test suggests that 2020/21 earnings of companies that repaid Business Rates Relief

⁵⁴ The relief originally excluded financial services (e.g. banks, building societies, cash points, bureaux de change, payday lenders, betting shops, pawn brokers); other services (e.g. estate agents, letting agents, employment agencies); medical services (e.g. vets, dentists, doctors, osteopaths, chiropractors); professional services (e.g. solicitors, accountants, insurance agents/ financial advisers, tutors); post office sorting offices; casinos and gambling clubs.

⁵⁵ Four companies eligible for Business Rates Relief did not report on the relief in 2021/22 in their consolidated accounts. We did not examine their first-tier subsidiary financial statements to confirm whether they retained or repaid the relief and are treated as missing data in **Table 2.24**.

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received in 2021/22 was statistically significantly higher than earnings of companies that retained Business Rates Relief (**Table A2.33**).

An analysis of extreme EBITDA values for companies that retained Business Rates Relief received in 2020/21 and 2021/22 shows that several companies reported large earnings (EBITDA) in both 2020/21 and 2021/22 (**Tables 2.25-2.28**). For instance, five companies that received and retained relief received in 2020/21, Associated British Foods, JD Sports Fashion, Flutter Entertainment, Next, and Marks and Spencer each generated earnings of over £700 million in both 2020/21 and 2021/22 (**Tables 2.25 and 2.26**).

Table 2.25: Highest and Lowest Reported Earnings (EBITDA) (2020/21): Repayment Status of Business Rates Relief received in 2020/21

	Highest/ lowest	Company	EBITDA 2020/21 (£)	BRR 2020/21 (£)
Retained	Highest	1 Associated British Foods	£1,821.0m	Not disclosed ²⁸
		2 JD Sports Fashion	£948.2m	£58.8m
		3 Flutter Entertainment	£788.3m	£4.8m
		4 Next	£723.4m	£82.0m
		5 Marks and Spencer Group ⁵⁶	£710.0m	£174.6m
	Lowest	1 Whitbread	-£191.3m	£117.8m
		2 Cineworld Group	-£125.6m	Not disclosed ²⁸
		3 WH Smith	£40.0m	£20.0m
		4 InterContinental Hotels Group	£81.0m	£4.1m
		5 Greggs	£110.9m	£18.8m
Fully or partially repaid	Highest	1 Tesco	£4,467.0m	Not disclosed ²⁸
		2 Sainsbury (J.)	£1,630.0m	Not disclosed ²⁸
		3 Kingfisher	£1,421.0m	Not disclosed ²⁸
		4 Burberry Group	£847.8m	Not disclosed ²⁸
		5 B&M European Value Retail	£833.8m	Not disclosed ²⁸
	Lowest	1 Domino's Pizza Group	£128.6m	Not disclosed ²⁸
		2 Travis Perkins	£192.5m	£34.8m
		3 Inchcape	£243.9m	£2.6m
		4 Pets At Home Group	£245.6m	£28.9m
		5 Howden Joinery Group	£309.7m	£8.0m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

⁵⁶ In the period leading up to the pandemic Marks and Spencer's financial year ended in late March. In 2021 and 2022 its financial year ended 3rd April and 2nd April respectively. In Table 2.25 we took EBITDA data from the company's 2021 financial statements (the comparable data for the preceding year was £1,005m).

Table 2.26: Highest and Lowest Reported Earnings (EBITDA) (2021/22): Repayment Status of Business Rates Relief received in 2020/21

Payment	Highest/ lowest	Company	EBITDA 2021/22 (£)	BRR 2020/21 (£)
Retained	Highest	1 Associated British Foods	£1,874.0m	Not disclosed ²⁸
		2 JD Sports Fashion	£1,316.7m	£58.8m
		3 Marks and Spencer Group ⁵⁷	£1,147.3m	£174.6m
		4 Next	£1,123.7m	£82.0m
		5 Flutter Entertainment	£737.5m	£4.8m
	Lowest	1 Rank Group	-£10.6m	Not disclosed ²⁸
		2 Wetherspoon (JD)	£13.6m	Not disclosed ²⁸
		3 WH Smith	£86.0m	£20.0m
		4 SSP Group	£89.9m	£9.1m
		5 Watches of Switzerland Group	£152.3m	£11.4m
Fully or partially repaid	Highest	1 Tesco	£4,347.0m	Not disclosed ²⁸
		2 Sainsbury (J.)	£2,285.0m	Not disclosed ²⁸
		3 Kingfisher	£1,701.0m	Not disclosed ²⁸
		4 Burberry Group	£864.0m	Not disclosed ²⁸
		5 Barratt Developments	£831.8m	Not disclosed ²⁸
	Lowest	1 Domino's Pizza Group	£133.5m	Not disclosed ²⁸
		2 Pets At Home Group	£267.7m	£28.9m
		3 Inchcape	£343.6m	£2.6m
		4 Howden Joinery Group	£517.1m	£8.0m
		5 Travis Perkins	£533.4m	£34.8m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

Similarly, several companies retaining Business Rates Relief received in 2021/22 – notably Associated British Foods, JD Sports Fashion, Flutter Entertainment, and Marks and Spencer Group – made large profits (>£700 million) in both 2020/21 (**Table 2.27**) and 2021/22 (**Table 2.28**).

⁵⁷ In the period leading up to the pandemic Marks and Spencer's financial year ended in late March. In 2021 and 2022 its financial year ended 3rd April and 2nd April respectively. In Table 2.26 we took EBITDA data from the company's 2022 financial statements (the comparable data for the preceding year was £710m).

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Table 2.27: Highest and Lowest Reported Earnings (EBITDA) (2020/21): Repayment Status of Business Rates Relief received in 2021/22

	Highest/ lowest	Company	EBITDA 2020/21 (£)	BRR 2021/22 (£)
Retained	Highest	1 Associated British Foods	£1,821.0m	Not disclosed ²⁸
		2 JD Sports Fashion	£948.2m	£31.0m
		3 Flutter Entertainment	£788.3m	£4.8m
		4 Marks And Spencer Group ⁵⁸	£710.0m	£62.2m
		5 Frasers Group	£586.5m	£97.5m
	Lowest	1 Whitbread	-£191.3m	£56.3m
		2 Cineworld Group	-£125.6m	Not disclosed ²⁸
		3 WH Smith	£40.0m	£40.0m
		4 Greggs	£110.9m	£14.9m
		5 Watches of Switzerland Group	£111.8m	£23.3m
Fully or partially repaid	Highest	1 Tesco	£4,467.0m	Not disclosed ²⁸
		2 Sainsbury (J)	£1,630.0m	Not disclosed ²⁸
		3 Kingfisher	£1,421.0m	Not disclosed ²⁸
		4 Burberry Group	£847.8m	Not disclosed ²⁸
	Lowest	1 Domino's Pizza Group	£128.6m	Not disclosed ²⁸
		2 Pets at Home Group	£245.6m	Not disclosed ²⁸
		3 Barratt Developments	£520.7m	Not disclosed ²⁸
		4 Next	£723.4m	£49.0m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

⁵⁸ In the period leading up to the pandemic Marks and Spencer's financial year ended in late March. In 2021 and 2022 its financial year ended 3rd April and 2nd April respectively. In Table 2.27 we took EBITDA data from the company's 2021 financial statements (the comparable data for the preceding year was £1,005m).

Table 2.28: Highest and Lowest Reported Earnings (EBITDA) (2021/22): Repayment Status of Business Rates Relief received in 2021/22

	Highest/ lowest	Company	EBITDA 2021/22 (£)	BRR 2021/22 (£)
Retained	Highest	1 Associated British Foods	£1,874.0m	Not disclosed ²⁸
		2 JD Sports Fashion	£1,316.7m	£31.0m
		3 Marks and Spencer ⁵⁹	£1,147.3m	£62.2m
		4 Flutter Entertainment	£737.5m	£4.8m
		5 Whitbread	£575.5m	£56.3m
	Lowest	1 Rank Group	-£10.6m	Not disclosed ²⁸
		2 Wetherspoon (JD)	£13.6m	£56.0m
		3 WH Smith	£86.0m	£40.0m
		4 SSP Group	£89.9m	£18.2m
		5 Watches of Switzerland Group	£152.3m	£23.3m
Fully or partially repaid	Highest	1 Tesco	£4,347.0m	Not disclosed ²⁸
		2 Sainsbury (J)	£2385.0m	Not disclosed ²⁸
		3 Kingfisher	£1701.0m	Not disclosed ²⁸
		4 Next	£1.123.7m	£49.0m
	Lowest	1 Domino's Pizza Group	£133.5m	Not disclosed ²⁸
		2 Pets At Home Group	£267.7m	Not disclosed ²⁸
		3 Barratt Developments	£831.8m	Not disclosed ²⁸
		4 Burberry Group ⁶⁰	£864.0m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

2.233 FTSE 350 Companies, Business Rates Relief, Repayment and Dividend Payments

On average, firms that retained Business Rates Relief paid out less in dividends to shareholders than firms which either fully or partially repaid the relief (Appendix 2.2, **Tables A2.37, A2.39, A2.41, A2.43**). However, independent samples t-tests Mann-Whitney U Tests suggest firms that repaid Business Rates Relief did not generally make statistically higher dividend payments than firm that retained the relief⁶¹ (Appendix 2.2, **Tables A2.38, A2.40, A2.42, A2.44**). In fact, several companies which retained money under the scheme paid out relatively large sums in dividends to shareholders. **Tables 2.29 and 2.30** present the highest dividend payments to companies in 2020/21 and 2021/22 that retained and repaid relief received in 2020/21. The data show that seven companies that retained relief paid out more than £40m in dividends each in either 2020/21 or 2022/21.⁶²

⁵⁹ In the period leading up to the pandemic Marks and Spencer's financial year ended in late March. In 2021 and 2022 its financial year ended 3rd April and 2nd April respectively. In Table 2.28 we took EBITDA data from the company's 2022 financial statements (the comparable data for the preceding year was £710m).

⁶⁰ In the period leading up to the pandemic Burberry Group's financial year ended in late March. In 2022 its financial year ended 2nd April. In Table 2.28 we took EBITDA data from the company's 2022 financial statements (the comparable data for the preceding year was £847.8m).

⁶¹ Save for one exception. Firms that repaid relief received in 2021/22 made statistically higher dividend payments in 2021/22 compared to companies that retained the relief for that year [$U = 110, p = 0.032$] at $p = 0.05$ (**Table A2.39**).

⁶² Taking into account missing data in the FAME dataset, the number may be higher, particularly in relation to dividends paid in 2021/22.

Table 2.29: Highest Dividend Payment to Shareholders (2020/21): Repayment Status of Business Rates Relief received in 2020/21

	Highest/ lowest	Company	Dividend 2020/21 (£)	BRR 2020/21 (£)
Retained	Highest	1 Associated British Foods	£271.0m	Not disclosed ²⁸
		2 Dunelm Group	£106.0m	£7.0m
		3 Currys	£78.0m	£4.0m
		4 WH Smith	£47.0m	£20.0m
		5 Cineworld Group	£37.6m	Not disclosed ²⁸
Fully or partially repaid	Highest	1 Tesco	£5,892.0m	Not disclosed ²⁸
		2 B&M European Value Retail	£547.4m	Not disclosed ²⁸
		3 Barratt Developments	£373.2m	Not disclosed ²⁸
		4 Sainsbury (J)	£232.0m	Not disclosed ²⁸
		5 Pets at Home Group	£37.1m	£28.9m

Table 2.30: Highest Dividend Payment to Shareholders (2021/22): Repayment Status of Business Rates Relief received in 2020/21

	Highest/ lowest	Company	Dividend 2021/22 (£)	BRR 2020/21 (£)
Retained	Highest	1 Next	£344.5m	£28.9m
		2 Grafton Group	£85.2m	£11.0m
		3 Associated British Foods	£49.0m	Not disclosed ²⁸
		4 Dunelm	£24.3m	£7.0m
		5 Greggs	£15.3m	£18.8m
Fully or partially repaid	Highest	1 Tesco	£731.0m	Not disclosed ²⁸
		2 Sainsbury (J)	£238.0m	Not disclosed ²⁸
		3 Burberry Group ⁶³	£219.0m	Not disclosed ²⁸
		4 Howden Joinery Group	£133.6m	£8.0m
		5 Travis Perkins	£105.4m	£34.8

⁶³ In the period leading up to the pandemic Burberry Group's financial year ended in late March. In 2022 its financial year ended 2nd April. In Table 2.30 we took dividend data from the company's 2022 financial statements (in the preceding year no dividend was paid).

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Tables 2.31 and **2.32** present the highest dividend payments to companies in 2020/21 and 2021/22 that retained Business Rates Relief received in 2021/22. The data show that 4 companies retaining relief – Associated British Foods, Dunelm Group, Currys, and Grafton Group – paid out more than £70m in dividends each in either 2020/21 or 2022/21.

Table 2.31: Highest Dividend Payment to Shareholders (2020/21): Repayment Status of Business Rates Relief received in 2021/22

	Highest/ lowest	Company	Dividend 2020/21 (£)	BRR 2021/22 (£)
Retained	Highest	1 Associated British Foods	£271.0m	Not disclosed ²⁸
		2 Dunelm Group	£106.0m	£22.0m
		3 Currys	£78.0m	£62.0m
		4 WH Smith	£47.0m	£40.0m
		5 Cineworld Group	£37.6m	Not disclosed ²⁸
Fully or partially repaid	Highest	1 Tesco	£5,892.0m	Not disclosed ²⁸
		2 B&M European Value Retail	£547.4m	Not disclosed ²⁸
		3 Barratt Developments	£373.2m	Not disclosed ²⁸
		4 Sainsbury	£232.0m	Not disclosed ²⁸
		5 Pets at Home Group	£37.1m	Not disclosed ²⁸

Table 2.32: Highest Dividend Payment to Shareholders (2021/22): Repayment Status of Business Rates Relief received in 2021/22

	Highest/ lowest	Company	Dividend 2021/22 (£)	BRR 2021/22 (£)
Retained	Highest	1 Grafton Group	£85.2m	£1.0m
		2 Associated British Foods	£49.0m	Not disclosed ²⁸
		3 Dunelm Group	£24.3m	£22.0m
		4 Greggs	£15.3m	£14.9m
		5 JD Sports Fashion	£14.9m	£31.0m
Fully or partially repaid	Highest	1 Tesco	£731.0m	Not disclosed ²⁸
		2 Next	£344.5m	£49.0m
		3 Sainsbury (J)	£238.0m	Not disclosed ²⁸
		4 Barratt Developments	£76.3m	Not disclosed ²⁸
		5 Domino's Pizza Group	£56.0m	Not disclosed ²⁸

2.234 FTSE 350 Companies, Business Rates Relief, Repayment and Executive Remuneration

Both the mean (4.3%) and median (-33.1%) percentage change in total executive (CEO and CFO) pay between 2019/20 and 2020/21 were lower at companies that retained Business Rates Relief received in 2020/21 compared to the percentage change in executive pay those at companies which repaid the relief (mean, 14.1%; median, 7.5%) (**Table A2.45**). The mean (81.2%) and median (45.6%) percentage change in total executive pay in the following year (2020/21-2021/22) were also both lower at companies that retained Business Rates Relief received in 2019/20 compared to those that repaid the relief (mean 109.2%; median, 81.6%) (**Table A2.46**). By contrast, the mean (89.5%) and median (62.3%) percentage change in total executive pay between 2020/21 and 2021/22 were higher for companies

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that retained Business Rates Relief received in 2021/22 compared to the percentage change in executive pay at companies that repaid the relief (mean, 67.2%; median, 28.6%) (Table A2.47).

Turning to percentage changes in total executive pay between the period immediately prior to the imposition of pandemic-related restrictions and the year following the peak of the economic disruption caused by the pandemic (2019/20-2021/22), for companies retaining Business Rates Relief received in 2020/21, the mean (25.4%) and median (-8.9%) percentage change were lower for companies that retained the relief compared to those that repaid the relief (mean, 76.6%; median, 47.7%) (Table A2.48). For companies receiving Business Rates Relief in 2021/22, the mean (34.0%) and median (-8.5%) percentage changes in total executive pay were again lower at companies that retained the relief, compared with those that repaid it (mean, 78.6%; median, 43.1%) (Table A2.49).

However, results of hierarchical multiple regression controlling for percentage changes in EBITDA and market capitalisation suggest that whether companies paid back Business Rates Relief had no statistically significant effect on the percentage change in executive pay between the year immediately prior to the introduction of pandemic-related restrictions (2019/20) and the year following the peak of the economic disruption caused by the pandemic (Tables A2.50-A2.55). This is consistent with some significant increases in total executive pay at companies that retained Business Rates Relief. Tables 2.33 and 2.34 illustrate large percentage changes in executive pay both between 2019/20-2020/21 and 2020/21-2021/22 at several companies which retained the relief – notably Watches of Switzerland Group, Flutter Entertainment, Marks and Spencer, Dunelm Group, Greggs, Associated British Foods, Currys, and Grafton Group.

Table 2.33: Highest Percentage Change in Total CEO & CFO Pay (2019/20-2020/21): Repayment Status of Business Rates Relief received in 2020/21

	Highest/ lowest	Company	Percentage Change in CEO & CFO Pay 2019/20- 2020/21 (%)	Change in CEO & CFO Pay 2019/20- 2020/21 (£)	BRR 2020/21 (£)
Retained	Highest	1 Watches of Switzerland Group	352.5%	£5.39m	£11.4m
		2 Flutter Entertainment	272.3%	£9.39m	£4.8m
		3 Marks and Spencer Group	81.6%	£1.36m	£174.6m
		4 Rank Group	15.9%	£0.12m	Not disclosed ²⁸
		5 Next	15.5%	£0.74m	£82.0m
Fully or partially repaid	Highest	1 B&M European Value Retail	178.5%	£3.44m	Not disclosed ²⁸
		2 Kingfisher	79.4%	£1.17m	Not disclosed ²⁸
		3 Domino's Pizza Group	72.2%	£0.77m	Not disclosed ²⁸
		4 Burberry Group	38.4%	£1.01m	Not disclosed ²⁸
		5 Pets At Home Group	30.0%	£0.84m	£28.9m

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

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Table 2.34: Highest Percentage Change in Total CEO & CFO Pay (2020/21-2021/22): Repayment Status of Business Rates Relief received in 2020/21

	Highest/ lowest	Company	Percentage Change in CEO & CFO Pay 2020/21- 2021/22 (%)	Change in CEO & CFO Pay 2020/21- 2021/22 (£)	BRR 2020/21 (£)
Retained	Highest	1 Dunelm Group	347.5%	£5.06m	£7.0m
		2 Greggs	198.6%	£2.02m	£18.8m
		3 Associated British Foods	197.4%	£3.73m	Not disclosed ²⁸
		4 Currys	196.9%	£3.09m	£4.0m
		5 Grafton Group	141.8%	£3.10m	£11.0m
Fully or partially repaid	Highest	1 Howden Joinery Group	258.7%	£3.65m	£8.0m
		2 Barratt Developments	216.5%	£4.12m	Not disclosed ²⁸
		3 Travis Perkin	208.2%	£5.01m	£34.8m
		4 Tesco	198.7%	£8.05m	Not disclosed ²⁸
		5 Burberry Group	128.7%	£4.70m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

Table 2.35 presents large percentage changes in total executive pay both between 2020/21 and 2021/22 at several companies which retained Business Rates Relief received in 2021/22– notably at Dunelm Group, Greggs, Associated British Foods, Currys, and Grafton Group.

Table 2.35: Highest Percentage Change in Total CEO & CFO Pay (2020/21-2021/22): Repayment Status of Business Rates Relief received in 2021/22

Payment	Highest/ lowest	Company	Percentage Change in CEO & CFO Pay 2020/21- 2021/22 (%)	Change in CEO & CFO Pay 2020/21- 2021/22 (£)	BRR 2021/22 (£)
Retained	Highest	1 Dunelm Group	347.5%	£5.06m	£22.0m
		2 Greggs	198.6%	£2.02m	£14.9m
		3 Associated British Foods	197.4%	£3.73m	Not disclosed ²⁸
		4 Currys	196.9%	£3.09m	£62.0m
		5 Grafton Group	141.8%	£3.10m	£1.0m
Fully or partially repaid	Highest	1 Barratt Developments	216.5%	£4.12m	Not disclosed ²⁸
		2 Tesco	198.7%	£8.05m	Not disclosed ²⁸
		3 Burberry Group	128.7%	£4.70m	Not disclosed ²⁸
		4 Kingfisher	55.5%	£1.47m	Not disclosed ²⁸
		5 Sainsbury	36.5%	£1.86m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

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Turning to percentage changes in executive pay between 2019/20 and 2021/22. The mean and median percentage change in executive pay at companies that repaid Business Rates Relief received in 2020/21 (70.2% and 41.8% respectively) were higher than at companies that retained relief received in 2020/21 (mean, 32.7%; median, -8.7%). The pattern was similar for companies that received business rates in 2021/22 with the mean and median percentage change in executive pay at companies that repaid business relief at 84.2% and 46.7% compared to 29.9% and -8.5% for companies that retained the relief. Nonetheless, executive officers (CEOs and CFOs) at several companies that retained Business Rates Relief were awarded large percentage increases in pay – notably executives at Flutter Entertainment, Dunelm Group, Marks and Spencer, Currys, and Grafton Group (**Tables 2.36** and **Table 2.37**).

Table 2.36: Highest Percentage Change in Total CEO & CFO Pay (2019/20-2021/22): Repayment Status of Business Rates Relief received in 2020/21

	Highest/ lowest	Company	Percentage Change in CEO & CFO Pay 2019/20- 2021/22 (%)	Change in CEO & CFO Pay 2019/20- 2021/22 (£)	BRR 2020/21 (£)
Retained	Highest	1 Flutter Entertainment	282.7%	£9.75m	£4.8m
		2 Dunelm Group	198.0%	£4.33m	£7.0m
		3 Marks and Spencer	169.9%	£2.82m	£174.6m
		4 Currys	99.4%	£2.32m	£4.0m
		5 Grafton Group	74.5%	£2.26m	£11.0m
Fully or partially repaid	Highest	1 B&M European Value Retail	225.9%	£4.35m	Not disclosed ²⁸
		2 Burberry	216.6%	£5.71m	Not disclosed ²⁸
		3 Kingfisher	178.9%	£2.64m	Not disclosed ²⁸
		4 Howden Joinery Group	86.6%	£2.35m	£8.0m
		5 Domino's Pizza Group	74.7%	£0.80m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

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Table 2.37: Highest Percentage Change in Total CEO & CFO Pay (2019/20-2021/22): Repayment Status of Business Rates Relief received in 2021/22

	Highest/ lowest	Company	Percentage Change in CEO & CFO Pay 2019/20- 2021/22 (%)	Change in CEO & CFO Pay 2019/20- 2021/22 (£)	BRR 2021/22 (£)
Retained	Highest	1 Flutter Entertainment	282.7%	£9.75m	£4.8m
		2 Dunelm Group	198.0%	£4.33m	£22.0m
		3 Marks and Spencer	169.9%	£2.82m	£62.2m
		4 Currys	99.4%	£2.32m	£62.0m
		5 Grafton Group	74.5%	£2.26m	£1.0m
Fully or partially repaid	Highest	1 B&M European Value Retail	225.9%	£4.35m	Not disclosed ²⁸
		2 Burberry Group	216.6%	£5.71m	Not disclosed ²⁸
		3 Kingfisher	178.9%	£2.64m	Not disclosed ²⁸
		4 Domino's Pizza Group	74.7%	£0.80m	Not disclosed ²⁸
		5 Sainsbury (J.)	46.7%	£2.21m	Not disclosed ²⁸

Source: FTSE 350 Company annual reports and accounts, 2020-2022; FAME, Moody's Analytics

2.24 Deferred Value Added Tax (VAT)

Businesses with a UK VAT registration were given the option of deferring VAT payments with no penalties or interest on payments charged [115]. Deferred VAT increases profit for the period, increasing reserves and the potential for the company to finance from reserves.

There were two deferral periods. Initially, payments for returns for the quarters ending 29th February 2020 (if not already paid by 20th March 2020), 31st March 2020 and 30th April 2020 did not have to be paid until 31st March 2021. This initial period was automatic, with no application or notification to HMRC required. It was then later announced that rather than making payment in full, businesses could opt to extend the deferral period, discharging their outstanding tax liability in up to eleven equal instalments [115].

2.25 Other Schemes

2.251 Temporary Reduced VAT

As part of its *Plan for Jobs*, the Government introduced a temporary 5% VAT rate on most tourist and hospitality-related activities (food, accommodation, and attractions). The 5% rate was originally applied to supplies made between 15th July 2020 and 12th January 2021. It was then extended to 30th September 2021 and replaced with a 12.5% rate until 31st March 2022 [64, 116].

Reporting on the approach companies took to reduced VAT was relatively opaque (Chapter 3). Nonetheless, companies – such as Whitbread [117, 118] and Wetherspoon [119, 120] – reported passing on the reduced rate to customers, whilst others retained it. Dominos', for instance, reported that its franchisees passed on 'some of the benefit of the VAT rate cut' though increased discounts,

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but the reduction was largely absorbed to 'offset increased COVID-19 related costs' [121]. Only one company in our sample, Mitchells and Butlers, provided an estimate of the value to the company of not passing on the reduction to the company [122].

2.252 Eat-Out-to-Help-Out (EOHOS)

The Eat-Out-to-Help-Out (EOHOS) scheme formed part of the government's *Plan for Jobs*⁶⁴ and aimed to support hospitality businesses reopening after the first COVID-19 lockdown period. Formally, the scheme aimed to protect jobs in the hospitality sector by encouraging consumers to return to eating out and was one of several support measures targeted at the hospitality sector. The government provided 50% off the cost of food and/or non-alcoholic drinks eaten-in at participating businesses UK-wide, Monday to Wednesday from 3rd to 31st August 2020. The discount was capped at £10 per head, there was no minimum spend requirement, and no limit on the number of times customers could use the offer [70]. Research by the Centre for Economic Performance using we footfall and job post data found the scheme, at a cost of £849 million [60, 70, 71], had a limited effect on either trade or jobs in the sector – with visitor numbers to, and advertisements for jobs in, restaurants, pubs and cafes rising only for the duration of the scheme [124].⁶⁵

2.253 Retail, Hospitality and Leisure Grant Fund (RHLGF)

Businesses in England in receipt of the Expanded Retail Discount on 11th March 2020 were eligible for a one-off cash grant of up to £25,000 per property with a rateable value of less than £51,000 [125, 126]. Similar schemes with marginally different conditions and thresholds ran in Wales, Scotland, and Northern Ireland [127-129]. Properties with a rateable value of £15,000 or under were eligible for grants of £10,000. Properties with a rateable value of over £15,000 but less than £51,000, were eligible for a grant of £25,000. The grants were dispersed through local authorities [125].

2.254 Omicron Hospitality and Leisure Grant

The Omicron Hospitality and Leisure Grant provided local authorities with one-off grant funding to support hospitality, leisure, and accommodation businesses. The scheme applied to businesses that offered in-person services, where the main service and activity took place in a fixed rate-paying premises, in the hospitality, leisure and accommodation sectors. Grants were limited to businesses that did not exceed a permitted subsidy allowance⁶⁶ and payments were tied to the rateable value of

⁶⁴ The *Plan for Jobs* was launched by the Treasury in July 2020 and aimed to help people back into work as the UK emerged from the first lock-down [123].

⁶⁵ Further, increases in footfall were concentrated on specific days when the discount was available. The programme failed to encourage people to go out for other purposes or to eat out once the discount ended [124].

⁶⁶ Subsidy allowances-imposed limits on the total amount of grant funding businesses could access. The Omicron Hospitality and Leisure Grant was subject to three subsidy allowances: the Small Amounts of Financial Assistance Allowance (£335,000 in Small Amounts of Financial Assistance over a rolling three year period); the COVID-19 Business Grant Allowance (up to £1.9 million across all COVID-19 Business Grant schemes); the COVID-19 Business Grant Special Allowance (which applied where businesses had reached their limits under the Small Amounts of Financial Assistance Allowance and the COVID-19 Business Grant Allowance and provided for potential access to a further allowance of funding of up to £10m across all COVID-19 Business Grant schemes). Grants under the three allowances could be combined for a potential total allowance of up to £12.2 million [130].

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business properties.⁶⁷ Businesses were entitled to receive a grant for each rateable property [131]. Businesses became eligible for support from 30th December 2021 and the scheme ended on 31st March 2022. Similar schemes ran in Wales [132], Scotland [73], and Northern Ireland [133].

2.255 Christmas Support Payment for wet-led pub (CSP)

This scheme provided local authorities with funding to provide a one-off payment to ‘wet-led pubs’ that predominantly served alcohol under Tier 2 or 3 restrictions of £1,000 [134]. Businesses self-certified that they met eligibility requirements (e.g. that they derived under 50% of their income from food sales) and were entitled to receive a grant for each rateable property [135]. Grants were limited to businesses that did not exceed a permitted subsidy allowance.⁶⁸

2.256 COVID-19 bus service support grant (CBSSG), Bus Recovery Grant (BRG), COVID-19 Support Grant (CSG) scheme for Scotland, and Bus Emergency Scheme (BES) for Wales

CBSSG supported commercial bus operators in England⁶⁹ to ensure that they were able to provide service levels up to 100% of pre-COVID-19 levels without operators making a profit or a loss [136]. CBSSG represented an additional funding stream over and above the Bus Service Operators Grant (BSOG). A reconciliation process sought to make operators no better or worse off than pre-COVID-19 levels, on their net costs of operation. Operators receiving an overpayment on this basis were required to repay the excess [137]. The BSSG was superseded by the Bus Recovery Grant (BRG) [138], which was made available to bus operators running services in England outside of London and Greater Manchester running at 90% or more of pre-COVID-19 mileage levels [138, 139].

Similar schemes ran in Scotland, Wales, and Northern Ireland. Operators in Scotland initially received funds under the COVID-19 Support Grant (CSG), which required them to deliver between 25% and 35% of bus service levels for the period of the scheme. In June 2020, additional funding was made available to increase bus services via the COVID-19 Support Grant – Restart (CSG-R), which was introduced to cover the ongoing loss of fare-paying passenger revenue. Operators received a one-off payment (on a cost per bus basis) to help bring bus fleets back into operation and a standard rate per forecast live kilometres, paid to operators every 4 weeks. Regular financial reconciliations are undertaken to guard against overpayments. An estimated £120 million was extended between 2020-21. The funding was subject to regular reconciliation to guard against overpayment. On 8th September 2021, the grant was extended with up to £42 million in additional funding available for 4 October 2021 to 31 March 2022. The funding required for the 2021-22 financial year was forecast at £88.2 million [140, 141].

2.257 Emergency Measures Agreements (EMAs) and Emergency Measures Recovery Agreements (EMRAs)

The Department for Transport (DfT) agreed Emergency Measures Agreements (EMAs) with privately owned franchised train operating companies (TOCs) to mitigate the financial impacts resulting from

⁶⁷ Payments depended on rateable value. Businesses with a rateable value of £15,000 or below could claim £2,667; businesses with a rateable value between £15,000 and £51,000 could claim £4,000; businesses with a rateable value of £51,000 or above could claim £6,000.

⁶⁸ Ibid.

⁶⁹ Excluding London and Greater Manchester, which had their own funding schemes.

the pandemic and ensure that rail services could continue to operate. Passenger usage dropped as low as 4% of pre-pandemic levels, following government advice not to travel. The EMAs took effect from 1st April with their financial provisions back-dated to 1st March. For most operators, EMAs applied until 20th September 2020 and operated as a temporary amendment to the underlying franchise agreement. They were replaced by Emergency Recovery Measures Agreements (ERMAs) from 21st September 21. These represented a further temporary agreement to underlying franchise agreements and varied in length from 6-18 months.

Under EMAs and ERMA, the DfT received revenue collected and pays most operating costs incurred by the operators through a regular franchise payment. This is made roughly every four weeks. The payment is used to entirely fund the provision of rail services. DfT says none of the money passes to shareholders.

Operators can also earn management and performance fees which are payable retrospectively on receipt of audited statutory accounts covering the period to which the fees relate. In due course, and subject to conditions, these are earnings that can be passed on to shareholders.

2.3 Scheme Restrictions on (and other Efforts to Manage) Executive Pay and Capital Distributions

Efforts to restrict executive pay and capital distributions⁷⁰ to shareholders at companies participating in schemes took effect through formal scheme restrictions, actions by the Bank England in relation to companies under its supervision, and guidance from investor bodies. We discuss the limitations of these efforts below.

2.3.1 Scheme Restrictions on Executive Pay and Capital Distributions

Of those schemes outlined in **Table 2.1**, few were subject to formal programme restrictions on executive pay and capital distributions (**Table 2.38**). Moreover, restrictions that did apply were relatively limited, subject to exemptions, and characterised by weak enforcement mechanisms.

⁷⁰ Capital distributions cover dividends payments and share repurchases. Share repurchases or buybacks involve companies using cash to buy shares of its own stock. Companies may repurchase their shares for a range of reasons. These include returning cash to shareholders, offsetting the issuance of shares from employee stock options, or increasing earnings per share or some other financial metric (e.g., return on equity). An increase in earnings per share typically elevates the market value of remaining shares. Further, if the company pays out the same amount of money to shareholders annually in dividends, each shareholder will receive a larger annual dividend as the total number of shares has fallen. Share buybacks can also reduce the amount shareholders' pay in tax. Unlike dividends, which are taxed as income, repurchased shares are taxed as capital gains. Further, shareholders who hold on to their shares face no immediate tax liability as there is no payment to investors. After repurchase, the shares are cancelled or held as treasury shares.

Table 2.38: Summary of Scheme Restrictions on Executive Pay and Capital Distributions (Dividends and Share Repurchases)

	Restrictions on Executive Pay	Restrictions on capital Distributions
CJRS	None	None
CCFF	Limited [95, 142]	Limited [95, 142]
Deferred Value Added Tax	None	None
CLBILS	Limited to loans > £50 million [93]	Declaring, making, paying dividend payments + share repurchases [93].
Expanded Retail Discount (Business Rates Relief) (including Welsh, Scottish, and Northern Irish equivalents)	None	None
Temporary reduced VAT	None	None
Eat-Out-to-Help-Out	None	None
Christmas Support Payment for wet-led pub (CSP)	None	None
RHLGF (including Welsh, Scottish, and Northern Irish equivalents)	None	None
Omicron Hospitality and Leisure Grant / Coronavirus (COVID-19): local authority discretionary fund (including Welsh, Scottish, and Northern Irish equivalents)	None	None
CBSSG/CSG/BRG (and Welsh, Scottish and Northern Irish equivalents)	None	Limited [136] ⁷¹
CSG-R (Scotland)	None	Limited [143, 144] ^{72 73}

By way of illustration, on 19th May 2020, HM Treasury announced that businesses participating in the CCFF may be required to commit to ‘restraint on their capital distributions and on senior pay’ under limited conditions. These included an increase in a business’s CCFF limit, over and above that suggested by its investment rating, and CCFF transactions which involved commercial paper (see below) maturing on or after 19th May 2021 [95]. Business’s which met these conditions were asked to provide a letter outlining their commitment to pay and capital distribution ‘restraint’, which the Treasury reserved the right to publish if the terms of the letter were not complied with [95]. For limited liability partnerships, distributions to partners were set at a level which the Treasury ‘considered appropriate when compared to distributions in the 2019-20 financial year’ [95, 142].

Limits on executive pay and capital distributions under the CLBILS were equally limited. Restrictions on cash bonuses and pay rises for in-post senior management did not materialise until companies

⁷¹ Payments under CBSSG aimed to ensure that bus operators provided service levels up to 100% of pre-COVID-19 levels without operators making a profit or a loss [136].

⁷² In relation to the CSG-R (Scotland), any profit before tax was treated as an overpayment and recovered during a reconciliation exercise. The model public service contract published by Transport Scotland include a term prohibiting operators from making payments to their shareholders or owners (including those of its parent company or other member of the relevant corporate group) covering the period in which CSGR funding was received [143].

⁷³ Payments to EMAs and ERMA were used entirely to fund the provision of rail services. However, operators could also earn management and performance fees in parallel, which were payable retrospectively on receipt of audited statutory accounts covering the period to which the fees relate. Subject to conditions, these fees represented earnings that could be passed on to shareholders [144].

borrowed more than £50 million and did not apply where they were agreed before the facility was taken out or where they were in keeping with similar rises made in the previous year and did not have a material impact on the borrower's ability to repay the facility [93]. Further, members of senior management joining the group after the date of the facility were not instantly subject to the restrictions, although they applied to subsequent cash bonuses and pay rises after they have joined the group [93].

Restrictions on capital distributions were marginally tighter. Companies borrowing more than £50 million were subject to restrictions on declaring, making, or paying dividend payments⁷⁴ and share repurchases⁷⁵ made subsequent, but not prior, to the business participating in the scheme [93]. The restrictions apply until the facility is repaid in full [93].

2.32 Prudential Regulation Authority (Bank of England) Guidance

Actions by the Bank of England on pay and capital distributions were not strictly confined to businesses participating in support schemes nor to executive compensation. In March 2020, the Bank of England wrote to large UK banks⁷⁶ through the Prudential Regulation Authority (PRA),⁷⁷ requiring them, in effect, to suspend dividends and buybacks on ordinary shares until the end of 2020, to cancel payments of any outstanding 2019 dividends, and not to pay cash bonuses to senior staff, including 'all material risk takers' [145].⁷⁸

Letters to insurance companies and regulated UK Market Infrastructures and Specified Providers (FMIs),⁷⁹ which also fall under the supervision of the Bank of England, were weaker. Insurance companies were simply reminded 'to pay close attention to the need to protect policyholders and maintain safety and soundness' when making decisions on variable pay and distributions, and that distributions should be 'prudent and consistent with their risk appetite' [147]. FMIs, by contrast, were reminded to pay close attention to the additional risks and potential financial operational demands arising from COVID-19 and to discuss with the Bank of England in advance of making distributions to shareholders [148].

⁷⁴ The restriction extends to: charges, fees or other distributions (or interest on any unpaid dividend, charge, fee or other distribution) on or in respect of the borrowing company's share capital (or any class of its share capital); repaying or distributing any dividend or share premium reserve; paying or allowing any member of its group to pay any management, advisory or other fee to or to order of any of the shareholders (or if the borrower or such member of its group is a partnership, partners) of the borrower or such member of its group [93]. In the case of partnerships, it also applies to equivalent payments to partners [93].

⁷⁵ The restriction extends to redeeming, defeasing, retiring or repaying any of the company's share capital or resolving to do so [93].

⁷⁶ HSBC, Santander, Standard Chartered, Barclays, RBS, Lloyds Banking Group and the Nationwide Building Society [145].

⁷⁷ The Prudential Regulation Authority supervises banks, building societies, credit unions, major investment firms, and insurers.

⁷⁸ The letter only requested that dividends and buybacks on ordinary shares be suspended. By contrast, in relation to its request for banks not to pay cash bonuses, the letter noted that the Prudential Regulation Authority stood ready to use its supervisory powers where banks did not agree to take the requested action [145].

⁷⁹ FMIs are involved in the clearing, settlement, and recording of financial transactions and include payment systems, central securities depositories, and central counterparties [146].

Restrictions on senior pay and capital distributions to large banks were short-lived. This reflected their underlying rationale, which was to avoid an oversized depletion of banks' capital. In December 2020, the PRA effectively announced an end to the suspension of capital distributions and cash bonuses,⁸⁰ following stress tests of banks' capital positions [150]. In relation to capital distributions, the PRA's announcement included a framework of temporary guardrails to govern decisions for 2020 distributions [150].⁸¹ Beyond that, the announcement noted the PRA's intention to transition back to its standard approach to distributions [150]. In July 2021, the guardrails were formally removed [151]. On the issue of pay, the PRA simply noted that it expected firms to 'exercise a high degree of caution and prudence in determining the size of any cash bonuses granted to senior staff' and that it would 'scrutinise proposed pay-outs closely' to ensure banks had applied the PRA's remuneration regime appropriately [150].

2.33 Investment Association Recommendations

The Investment Association, the trade association for the investment managers and investment management firms in the UK, also produced guidance on executive pay.⁸² In guidance published in April and updated in November 2020, the Association recognised the relevance of levels of executive pay to economic equity, noting that remuneration committees should not 'isolate executives from the impact of COVID-19 in a manner that is inconsistent with the approach taken to the general workforce', adding that committees ought to 'sensitively balance' the 'need to incentivise executives at a time when they are being asked to show significant leadership and resilience' against the effect of the pandemic on shareholders, employees, and other stakeholders [153, 154].

This was reflected in more specific recommendations, which collectively urged pay restraints to avoid 'significant reputational ramifications' [154]. The April guidance noted that where companies had taken government support, such as to furlough employees, then shareholders would 'expect this to be reflected in executives' remuneration outcomes' and that remuneration committees and management should be 'mindful of the wider employee context' where they had been furloughed or otherwise required to take a cut in pay [154]. The November guidance was more specific still, outlining an expectation that executives of companies which had received 'direct' government support (e.g., via CJRS) should not receive an annual bonus for the financial years 2020 or 2020/21, 'unless there [were] truly exceptional circumstances' [153]. By contrast, guidance on 'indirect support', such as business rate relief was weaker, despite the recognition that this might have a significant positive impact on financial performance and therefore remuneration outcomes' [153]. Here the advice was simply that shareholders would 'expect Remuneration Committees to disclose how they [had] taken into account the impact of these government measures on remuneration outcomes' [153]. For all companies, the November guidance note that, 'shareholders would not expect LTIP grants to be

⁸⁰ Guidance to FMIs was also withdrawn in November 2021 [149].

⁸¹ In relation to distributions to ordinary shareholders for full-year 2020 results, banks were instructed not to exceed the higher of: 20 basis points of risk-weighted assets as at end-2020; or 25% of cumulative eight-quarter profits covering 2019 and 2020 after deducting prior shareholder distributions over that period. The announcement left open the possibility of banks making shareholder distributions in excess of these guardrails, but noted that they should 'expect a high bar for justifying any exceptions' [150].

⁸² See also the June opinion of the International Corporate Governance Network [152]. This also highlight considerations of economic equity and the reputational risks attendant on companies seeking to maintain high levels of executive pay, or award large variable pay awards, while seeking financial support from government or reducing workforce headcount or pay [23].

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cancelled and replaced with another long-term incentive grant' and, importantly, that they did 'not expect remuneration committees to compensate executives with higher variable remuneration opportunity in 2021 for lower remuneration received in 2020 due to the pandemic' [153].

By contrast, recommendations for companies that had suspended or cancelled dividends were stronger, reflecting the Associations' role as an advocate for major shareholders in UK listed companies. Here the guidance noted that shareholders expected remuneration committees to clearly disclose how the cancellation of an intended dividend had been reflected in 2019 or 2020 remuneration outcomes either through the use of discretion or malus provisions to reduce any deferred shares relating to the 2019 annual bonus, or by reflecting this in 2020 bonus outcomes [153].

Chapter 3: COVID-Supports to Business and Transparency

Key Findings

- Publication of firm-level data on government supports by government was either non-existent or incomplete and fell short of the approach taken to transparency under the newly enacted Subsidy Control Act, 2022. This creates major challenges in assessing how public money and assistance has been used and how it has benefited different corporate stakeholders.
- Most companies reported receiving support from the UK government in their consolidated financial statements and, where relevant, those of their first-tier UK subsidiaries. However, in many cases the value of these supports was neither specified in consolidated or first-tier UK subsidiary financial statements. This applied across government support schemes and included grants received under the CJRS and Eat-Out-to-Help-Out, deferred tax, business rates relief, and reduced VAT.
- Financial reporting standards which address explicitly how government support should be accounted for and disclosed are relatively limited in scope and exclude many COVID-supports.
- IAS 20 – the key financial reporting standard governing how government grants and assistance should be reported – does not require disclosure of grant income by scheme or country. This creates major methodological challenges in obtaining supports data from the accounts of transnational companies with complex group structures.
- Financial reporting standards such as IAS 20 generally focus on income that is likely to be received in a given financial year and, therefore, fail to address projected income under schemes where income is received over several years - as in the case of grant income to accredited lenders under government loan schemes.
- Several companies appear to have either ignored or misinterpreted the disclosure provisions contained in reporting standards. Few accredited lenders, for example, appear to have disclosed the ‘nature and extent’ of payments to cover lender fees (CBILS) and interest payments for the first twelve months (CBILS and BBLs).
- Reporting requirements fail to capture the reliance of asset-light companies on government support, such as those that rely extensively on franchises.

3.1 Introduction

According to a recent BEIS policy paper on transparency under the UK’s new subsidy control regime, being able to see ‘which subsidies are being granted and to which beneficiaries’ is a matter of ‘public interest’ [51]. More generally, transparency of government supports to business enables the public to see how public money is being spent and, by facilitating public scrutiny, is understood to lead to better subsidy design [51].

In this chapter, we consider the challenges involved in tracking which companies have taken advantage of government supports and by how much, both of which are essential to understanding

how public money and assistance is benefiting different corporate stakeholders – executive board members, shareholders, and employees. We look first at the government’s efforts to promote transparency as it relates to COVID-supports data, by examining government transparency data, and consider public access to firm-level data with reference to BEIS’s subsidy control transparency obligations [51]. We then examine company reporting of government supports in annual reports and accounts, setting our analysis within prevailing accounting standards on government grant and assistance reporting.

3.2 Government Publication of Firm-Level Data

Table 3.1 summarises data transparency releases of firm-level data for government support schemes in England available to large businesses. The information presented illustrates the extremely limited public availability of firm-level data for schemes relevant to larger businesses. Government departments have failed to publish firm-level data for all but four of the schemes.⁸³ Further, in relation to the CJRS, one of the three schemes for which firm-level data has been made public, information was only available for the period 1st December 2020 to 30th September 2021 [157]. Employer (firm)-level data for the first phase of the scheme between March and October 2020 was not published. Further, the exact value of claims for the period December 2020 to September 2021 was not published. Instead, HMRC indicated where the claim fell within a series of fourteen bands. Finally, published data did not include employers that had successfully applied to have their details withheld or who paid back the subsidy before the list was produced, and who claimed but were not paid the grant [157].

Additional data is available via the government’s new web-based service for searching subsidies awarded by the UK government since 1st January 2021 [156]. Our analysis⁸⁴ suggests that access to COVID-subsidy data via the service is limited. This is likely due to two key reasons. First, the database underlying the service does not contain subsidies awarded prior to 1st January 2021. Second, public authorities are not required to submit individual subsidies for entry into the database where it has been awarded under an uploaded scheme and the individual award is less than £500,000 or where the support constitutes minimal financial assistance (i.e. does not exceed £315,000 over three years) [51].⁸⁵

⁸³ Firm-level data for BBL was published over a year after the closure of the scheme in response to criticism of the level of fraud under the scheme [155]. Publication of firm-level data for schemes which FTSE 350 companies did not use (e.g. the Government Sport Survival Package [57, 58], the Recovery Loan Scheme (RLS), and the Airport and Ground Operations Support Scheme (AGOSS) [59]) is limited to the new web-based service for searching subsidies awarded by the UK government since 1st January 2021 [156], which even when taking account of the financial threshold for reporting subsidies in the database, does not appear to.

⁸⁴ We downloaded all subsidies within the database on 4th July 2022 and then filtered for COVID subsidies outlined in **Table 3.1**. By way of illustration of the limitations of the database, this exercise produced 30 entries for loans under CLBILS.

⁸⁵ These thresholds are higher than the previous limit under the European Union state aid Transparency Register.

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Table 3.1: Firm (employer)-Level Data Transparency Releases for Government Support Schemes in England available to Large Businesses⁸⁶

Sector Restrictions / Relevance	Scheme	Employer-Level Data	Scheme Type (International Accounting Standards)	Coverage of International Accounting Standard 20
All	Coronavirus Job Retention Scheme	Partial [157]	Grant	Within-scope
	Joint HM Treasury and Bank of England's Covid Corporate Financing Facility	Full [162]	Grant	Within-scope subject to rate of interest on loan
	Deferred value added tax	x	Deferred tax	Out-of-scope
	Coronavirus Large Business Interruption Loan Scheme	x	Grant	Within-scope subject to rate of interest on loan
Financial Sector (accredited lenders)	Bounce Back Loan Scheme	Full [155]	Loan guarantee / Grant ⁸⁷	Out-of-scope / Within scope
	Coronavirus Business Interruption Loan Scheme	x	Loan guarantee / Grant ⁸⁸	Out-of-scope / Within-scope
	Coronavirus Large Business Interruption Loan Scheme	x	Loan guarantee	Out-of-scope
Hospitality, Leisure, and Tourism	Expanded Retail Discount (Business Rates Relief)	x ⁸⁹	Temporary tax exemption	Out-of-scope
	Temporary reduced VAT	x	Temporary tax reduction	Out-of-scope
	Eat-Out-to-Help-Out	x	Grant	Within-scope
	Christmas Support Payment for wet-led pub	x	Grant	Within-scope
	Omicron Hospitality and Leisure Grant	x	Grant	Within-scope
Travel	COVID-19 Bus Service Support Grant	x	Grant	Within-scope
	Bus Recovery Grant	x	Grant	Within-scope
	Emergency Measures Agreements and Emergency Recovery Measures Agreements	Full [80]	Grant	Within-scope
Retail	Expanded Retail Discount (business rates relief)	x	Temporary tax exemption	Within-scope

Source: UK Government Department Websites

⁸⁶ The data in the table relate to schemes announced by government, which have been formally presented as support schemes. Not all schemes have been publicly announced and/or consistently presented as support schemes. The newspaper industry, for example, received £35m for a 'three-month advertising partnership' [158]. The partnership was developed by the industry to deliver 'government communications in an intimate, human and compassionate tone that readers can relate to' [158]. The arrangement involved advertising content, but, according to reports, was also described as subsidy when the deal was announced [159]. Most of the funds are reported to have been reserved for members of the News Media Association [160, 161].

⁸⁷ We consider the grant element to apply to government payments to lenders to cover the costs of borrowers' interest payments for the first twelve months of the loan period. See Chapter 2 and below in the main text.

⁸⁸ We consider the grant element to apply to government payments to lenders to cover the costs of borrowers' interest payments for the first twelve months of the loan period and lenders' fees. See Chapter 2 and below in the main text.

⁸⁹ Some local authorities publish firm-level data on business rates, which includes business reliefs. Publication of this data is, however, uneven and limited.

3.3 Company reporting on COVID-Supports

In practice, the deficiency of government data means that company annual reports and accounts represent the only method for identifying how and how much large public companies have benefited from government support.⁹⁰ However, company annual reports and accounts are also limited as a source of firm-level data. Many companies reported receiving support in their consolidated financial statements and accounts of first-tier UK subsidiaries, but not the specific value. This was particularly striking for grants received under the CJRS,⁹¹ Eat-Out-to-Help-Out, deferred tax, business rates relief, and reduced VAT (Table 3.2).

Table 3.2: FTSE 350 Company reporting of COVID-19 related supports in Consolidated Financial Statements and First Tier Subsidiaries

Scheme and Reporting Year	Number of Eligible Businesses ⁹²	% Participation of eligible Businesses (n)	% Participating Companies reporting value of support (n) ⁹³
Coronavirus Job Retention Scheme 2020/21	240	32.5% (78)	53.8% (42)
Coronavirus Job Retention Scheme 2021/22	246	17.5% (43)	65.1% (28)
Eat-Out-Help-Out	6	83% (5)	40% (2)
Deferred Tax 2020	240	12.1% (29) ⁹⁴	37.9% (11)
Deferred Tax 2021	246	3.7% (9) ⁹⁵	55.6% (5)
Expanded Retail Discount (Business Rates Relief) 2020/21	24	75% (18) ⁹⁶	77.8% (14)
Expanded Retail Discount (Business Rates Relief) 2021/22	26	84.6% (22) ⁹⁷	72.7% (16)
Reduced VAT 2020/21	7	100% (7) ⁹⁸	14.3% (1) ⁹⁹
Reduced VAT 2021/22	8	100% (8) ¹⁰⁰	12.5% (1) ¹⁰¹

Source: Annual reports and accounts of FTSE 350 companies and first-tier UK subsidiaries

The limited value of annual reports and accounts as a source of data on government support is due to five factors. First, financial reporting standards which explicitly address how government support should be accounted for and disclosed are relatively limited in scope and exclude many COVID-

⁹⁰ See Appendix 1.2 for the approach taken to searching company financial reports.

⁹¹ For grants received under the CJRS in 2020, 30% of companies did not report a specific value in their consolidated accounts. For grants received under the CJRS in 2021, 28% of companies did not report a specific value.

⁹² All figures relate to companies reporting subsequent to the introduction of support schemes.

⁹³ All figures exclude companies that repaid supports within the reporting year, excepting deferred tax.

⁹⁴ Companies were only considered to have deferred tax where this was reported in consolidated accounts and first-tier UK subsidiaries.

⁹⁵ Companies were only considered to have deferred tax where this was reported in consolidated accounts and first-tier UK subsidiaries.

⁹⁶ Companies considered not to have participated where relief repaid within the reporting year.

⁹⁷ Companies considered not to have participated where relief repaid within the reporting year.

⁹⁸ All eligible companies are assumed to have participated irrespective of whether reduced VAT reported.

⁹⁹ All eligible companies are assumed to have participated irrespective of whether reduced VAT reported.

¹⁰⁰ All eligible companies are assumed to have participated irrespective of whether reduced VAT reported.

¹⁰¹ All eligible companies are assumed to have participated irrespective of whether reduced VAT reported.

supports. Second, IAS 20 does not mandate disclosure of grant income by scheme or country, which creates major methodological challenges in obtaining supports data from the accounts of transnational companies with complex group structures. Third, accounting for government grants under financial reporting standards focuses on income received in reporting years and, therefore, potentially fails to address projected income under schemes where such income is likely to be spread over several years¹⁰² - as in the case of grant income to accredited lenders under government loan schemes. Fourth, some companies either ignore or misinterpret the disclosure provisions contained in reporting standards. Finally, reporting requirements fail to capture the reliance of asset-light companies on government support. Before discussing these issues in greater depth, we first provide a brief synopsis of how accounting standards governing government supports reporting and disclosure apply to COVID-supports.

3.31 Government Support and Financial Reporting Standards

Most FTSE350 companies report in accordance with International Financial Reporting Standards (IFRS).¹⁰³ In addition, subsidiaries of FTSE 350 companies may report in accordance with Financial Reporting Standard 101 (FRS 101) where their ultimate parent prepares consolidated accounts.¹⁰⁴ The relevant reporting standard under IFRS and FRS 101 governing how government subsidies should be reported is the International Accounting Standard 20 *Accounting for Government Grants and Disclosure of Government Assistance* (IAS 20).

IAS 20 applies to 'grants'¹⁰⁵ and 'government assistance'. Grants involve 'transfers of resources' to companies 'in return for past or future compliance with certain conditions relating to the operating activities of the entity' [163], whereas government assistance covers other forms of government support which do not involve a transfer of resources and is defined as 'action by government designed to provide an economic benefit specific to an entity or range of entities qualifying under certain criteria' [163].

Additional clarification of these concepts is provided by examples of grants in the text of the standard and by specified exceptions to assistance, which work to narrow the application of the standard significantly. In relation to the former, IAS 20 specifies 'government loan[s] at a below-market rate of interest'¹⁰⁶ as within-scope grants, which covers financing extended under the CLBILS and CCFE (see

¹⁰² See IAS 20.12, which notes that government grants shall be recognised in profit or loss on a systematic basis over the periods in which the entity recognises as expenses the related costs for which the grants are intended to compensate [163].

¹⁰³ UK companies listed on an EU regulated market are required to prepare their consolidated financial statements in accordance with EU-endorsed IFRS. Until 31st December 2020, UK companies preparing financial statements in accordance with IFRS effectively applied EU-endorsed IFRS. Although, by way of a limited extension, companies whose accounting period began prior to 31st December 2020 could continue to apply EU-endorsed IFRS, new and amended IFRSs now require independent endorsement in the UK to be part of UK-adopted IFRS that apply by UK companies. In practice, the differences between EU and UK-endorsed IFRS are not, at present, significant. Finally, some companies also report in accordance with Financial Reporting Standard 102 – although this is more common among large private companies [164].

¹⁰⁴ FRS 102 also contains a reduced disclosure framework which is explained in section 1 of FRS 102 [165].

¹⁰⁵ IAS 20 draws a distinction between grants related to income and grants related to assets. The latter relate to grants whose primary condition is that companies purchase, construct or otherwise acquire long-term assets and are not relevant to COVID-19-related schemes[163].

¹⁰⁶ The benefit – i.e. the difference between the initial carrying value of the loan determined in accordance with IFRS 9 *Financial Instruments* and the proceeds received - is treated as a government grant [163].

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Table 3.1).¹⁰⁷ In relation to the latter ‘benefits that are available in determining taxable profit or tax loss, or are determined or limited on the basis of income tax liability’ [163]¹⁰⁸ and assistance that ‘cannot reasonably have a value placed upon them’¹⁰⁹ - which specifically includes the ‘provision of guarantees’ [163] - are excluded from the scope of the standard. These exceptions can be reasonably considered to extend to deferred VAT, Temporary reduced VAT,¹¹⁰ and business rates relief (Expanded Retail Discount) [166], notwithstanding some variation in interpretation across company reports. Frasers Group, for instance, described business rates relief explicitly as a government grant in both its 2021 and 2022 annual reports and accounts [167, 168].

IAS 20 requires within scope government support to be presented as part of profit or loss.¹¹¹ Here, the standard provides three reporting alternatives of varying degrees of transparency - either separately, or under a general heading such as ‘other income’, or deducted in reporting the expense to which the grant relates [163]. However, despite the potential for opacity inherent in the second two alternatives, the standard also stipulates that the ‘nature and extent’ of grants and government assistance should be disclosed.¹¹² Finally, where government support is not covered by IAS 20 companies are expected to exercise their judgment in reporting relevant and reliable information in accordance with IAS 8 [163]. This requires companies to consider guidance contained in standards which deal with ‘similar and related issues’ [163, 170], which in the present case is IAS 20.

3.32 Government Support and the Scope of IAS 20

Having IAS 8 as a residual standard for out-of-scope government support infuses a large measure of discretion within the approach taken to presenting COVID-supports in annual reports and accounts. This reflects the underlying purpose of the standard within the broader framework of accounting governance. IAS 8 is ultimately concerned with prescribing criteria for selecting and changing ‘accounting policies’ - that is principles, bases, conventions, rules and practices applied by companies in preparing and presenting financial statements [170]. In contrast to IAS 20, which explicitly addresses how government supports should be disclosed, IAS 8 guidance on how to develop accounting policies in the absence of an explicit financial standard is primarily concerned with how transactions, events,

¹⁰⁷ Other examples specified in IAS 20 include: ‘reduction of a liability to the government’ and forgivable loans from government (where there is reasonable assurance that the entity will meet the terms for forgiveness of the loan) [163].

¹⁰⁸ This includes, but is not limited to, ‘income tax holidays, investment tax credits, accelerated depreciation allowances and reduced income tax rates’ [163].

¹⁰⁹ Also excluded in the same paragraph are ‘transactions with government which cannot be distinguished from the normal trading transactions of the entity’, which would exclude the government’s ‘three-month advertising partnership’ reported above.

¹¹⁰ Although the Expanded Retail Discount, and temporary reduced VAT constitute ‘action[s] by government designed to provide an economic benefit specific to an entity or range of entities qualifying under certain criteria’, they also reasonably constitute benefits that are ‘available in determining taxable profit or tax loss’ [163] and, therefore, on a literal reading of IAS 20 fall outside of the definition of in-scope government assistance.

¹¹¹ IAS 20 requires government grants to be recognised over the period in which the company recognises expenses for the related costs for which the grants are intended to compensate.

¹¹² In addition, IAS 20 requires disclosure of the accounting policy adopted for grants and any unfulfilled conditions and contingencies attached to grants [11]. Reporting requirements for grants related to income under FRS 102 are broadly similar [165, 169]. These stipulate that such grants should be recognised as income in the period in which they become receivable within the statement of profit or loss and be disclosed separately as ‘grant income’ or ‘government grant’ or under ‘sundry income’.

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and conditions are integrated into financial statements,¹¹³ where itemised disclosure may not necessarily be material. Further to this, IAS 8 only requires management to ‘consider’ the requirements of financial standards which deal with ‘similar and related issues’ in formulating its accounting policies [170]. This works to infuse a large element of discretion with respect to how management interpret and apply IAS 20.

We found several good examples of relatively comprehensive disclosure of out-of-scope supports. For instance, the consolidated accounts of both the restaurant and pub company, Mitchells & Butlers PLC, and automotive distributor, Inchcape PLC, provided detailed, country-specific financial information on both within-scope (e.g., the CJRS, Eat-Out-to-Help-Out, local authority grants, the CCFF) and out-of-scope supports, such as business rates relief, VAT reduction and deferred VAT [122, 171-173].¹¹⁴ However, on balance, reporting of out-of-scope supports appears less plain and transparent than in-scope supports, reflecting the discretion inherent under IAS 8 (**Table 3.2**).

Taking business rates relief as an example, some companies failed to report receipt of business rates relief entirely in their consolidated accounts. The 2020 annual report and accounts of hospitality group, InterContinental Hotels Group PLC (IHG) is a case in point. These contained no note of receipt of business rates relief [174, 175], despite operating company subsidiaries of IHC May Fair Hotel Ltd, a wholly owned subsidiary of IHG, reporting business rates relief amounting to £4,092,386 (**Table A3.1**).

More commonly, companies reported receipt of business rates relief in their consolidated financial statement, and the value of the relief in operating subsidiaries financial statements. However, in some cases business rates relief data was omitted entirely from group company financial statements. In its 2020 annual report and accounts, for example, cinema operator, Cineworld, reported receipt of business rates relief. However, no estimate of the value of the relief was provided in either its consolidated or operating subsidiaries’ financial statements, this despite business rates relief being noted under its accounting policy on government grants (**Table 3.3**) [176].

Table 3.3: Disclosure of the Expanded Retail Discount (Business Rates Relief) within Cineworld’s UK Group Operating Companies’ Financial Statements for Year Ending 31st December 2020

Company	Principal Activity	Value	Narrative of Disclosure
CS (Norwich) Ltd	Operation of a cinema	Not reported	No narrative [177]
Cine-UK Ltd	Operation of cinemas	Not reported	No narrative [178]
Cineworld Cinemas Ltd	Operation of cinemas	Not reported	No narrative [179]
City Screen (Brighton) Ltd	Operation of cinemas	Not reported	No narrative [180]
City Screen (Liverpool) Ltd	Operation of a cinema	Not reported	No narrative [181]
City Screen (Stratford) Ltd	Operation of a cinema	Not reported	No narrative [182]
City Screen (York) Ltd	Operation of a cinema	Not reported	No narrative [183]
CS (Brixton) Ltd	Operation of a cinema	Not reported	No narrative [184]
CS (Exeter) Ltd	Operation of a cinema	Not reported	No narrative [185]
Picturehouse Cinemas Ltd	Operation of cinemas	Not reported	No narrative [186]

¹¹³ IAS 8 calls on management to use its judgement in developing and applying a policy that produces information which is ‘relevant to the economic decision-making needs of users’ and ‘reliable’ in so far as it produces financial statements which represents accurately the financial position, financial performance and cash flows of the company and reflect the economic substance of transactions [170].

¹¹⁴ Both sets of accounts were audited by Deloitte LPP.

Source: Annual reports and financial statements of Cineworld's UK operating companies

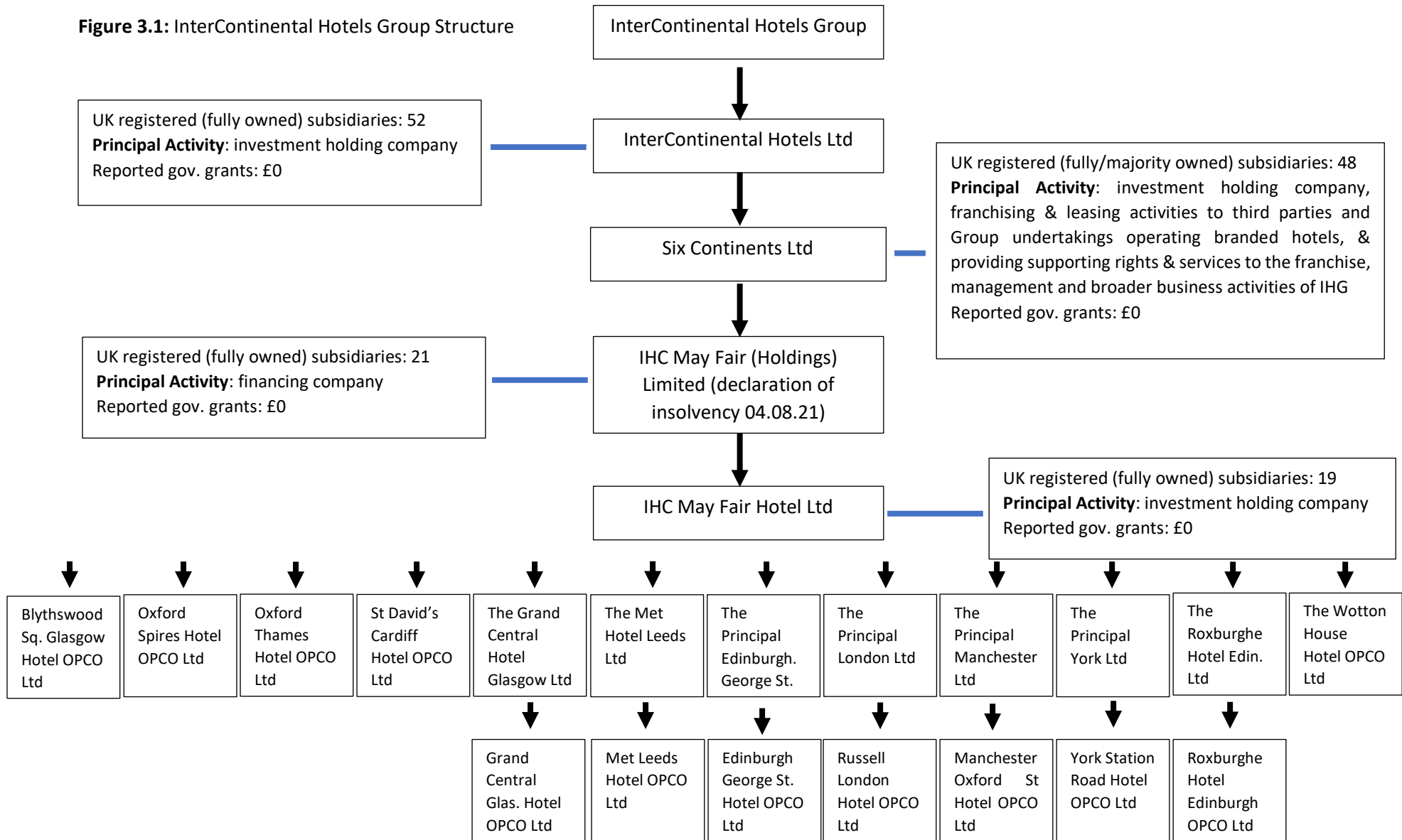
3.33 Support Data, Disclosure, and Consolidated Accounts of Transnational Companies with Complex Group Structures

Even where accurately reported, obtaining firm-level data from consolidated accounts of multinational companies is characterised by major methodological challenges. IAS 20 does not mandate disclosure of grant income by scheme or country, which is reflected in the practice of many multinational national companies aggregating income from different schemes and different countries in their consolidated accounts. This causes major problems in assessing the value of support received from the UK government for companies with complex group structures, as the data is typically reported across the financial statements of operating subsidiaries.

IHG's approach to reporting grants received under the CJRS provides a good illustration of these problems. The company's 2020 annual report and accounts reported receiving US\$23m in subsidies for staff costs in 2020 respectively, potentially spread across the 100 countries [174, 175]. Further, its 2021 report noted that, 'in respect of the directly-employed corporate workforce, no UK government subsidies for staff costs was obtained in either 2020 or 2021' [175]. According to Moody's Analytics (FAME), the company has 93 UK wholly and majority owned subsidiaries, which perform different functions across the group and, therefore, which may or may not have received UK government grants under the CJRS. Consequently, to identify UK-specific scheme data for the group required examination of the financial statements of all these companies. In practice, grants received under the CJRS were outlined in the financial statements of its operating companies (**Figure 3.1**).

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Figure 3.1: InterContinental Hotels Group Structure



3.34 Company reporting and Longer-Run Schemes (Government Loan Schemes)

Reporting of government support to accredited lenders' provision of loans under government loan schemes is potentially governed by IAS 20 and IFRS 9,¹¹⁵ which are not designed to require lenders to report on government guarantee exposure.

IAS 20 notes that government grants should not be recognised until there is 'reasonable assurance' that the grant will be received. This requirement effectively means that government payments to accredited lenders to cover defaults under government loan schemes¹¹⁶ (see Chapter 2) are likely to be booked piecemeal over time as and when they occur. Reporting requirements for the loans themselves are governed by IFRS 9, which specifies how businesses should classify and measure financial assets and liabilities and has no specific provisions for the type of loans made under government loan schemes and no specific provisions on government guaranteed exposure or expected credit losses¹¹⁷ for loans made under government loan schemes.

Information disclosed on scheme loans is, therefore, inconsistent (see **Tables 3.4-3.6**), and incidental to reporting obligations relating to expected credit loss and impairment.¹¹⁸ Some lenders, such as Barclays PLC, have reported detailed information on loan values by scheme, government guaranteed exposure, and, importantly, associated debt split and impairment allowances, which provide a relatively good indication of the risk of default by value and the projected costs to the business, and, therefore, firm-level costs to government under the schemes [99, 188]. As outlined in **Tables 3.4, 3.5, and 3.6**, however, this level of transparency is exceptional, with few lenders reporting metrics for risk of default or ongoing government guaranteed exposure.

¹¹⁵ See section 3.35 for a discussion of payments to cover lender fees and interest payments.

¹¹⁶ IAS 20 specifies 'the provision of guarantees' as examples of 'government assistance that cannot reasonably have a value placed upon them' [163]. This does apply in the present case where payment of a specific sum to the lender arises as a consequence of borrower default.

¹¹⁷ International Financial Reporting Standard 9 (IFRS 9), which outlines how businesses should recognise the reduction in value of assets, introduced an "expected credit loss" (ECL) framework for the recognition of impairment. This requires businesses to recognise expected credit losses on an ongoing continuing basis [187] and update the amount of expected credit losses recognised at each reporting date to reflect changes in an asset's credit risk. In this respect, impairment of loans is recognised in three stages. Stage 2 covers loans where the credit risk has increased significantly since initial recognition and is not considered low. Stage 3 covers loans where credit risk has increased to the point where it is considered credit-impaired [187].

¹¹⁸ Given the term length of loans under the schemes, it is unclear whether accredited lenders would have received monies to cover the cost of defaults on loans under CBILS, BBLS, and CLBILS [21] prior to the study cut-off date. We also note here that 'guarantees' only constitute an exception to within scope 'government assistance' under IAS 20, where they 'cannot reasonably have a value placed upon them' [163], which does not apply to government guarantees under the loan schemes.

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Table 3.4: Summary of Reporting of Bounce Bank Loan Scheme by Public Limited Company Accredited Lenders and Key Operating Subsidiaries

Company	Value of Loans				Expected credit loss, default risk, credit impairment losses/charges		Government Guaranteed Exposure			
	2021		2020		2021	2020	2021		2020	
	Reported	Value (£m)	Reported	Value (£m)	Reported	Reported	Reported	Value (£m)	Reported	Value (£m)
Barclays PLC [99, 101, 188, 189]	✓ ^c	9,382 ^d	✓ ^c	9,916 ^d	✓ ^{c ecl}	✓ ^{c ecl}	✓ ^c	9,366	✓ ^c	9,916
Close Brothers Group PLC¹¹⁹ [107, 190-194]	x ^{c 120}	x	✓	<2m ^a	x	x	x	x	x	x
Funding Circle	x	-	✓ ^c	27 ^d						
HSBC Holdings PLC [98, 104, 195, 196]	x	-	✓ ^s	6,900 ^a	x	x	x	-	x	-
Investec PLC [197-200]	x ^{c 121}	-	x ^{c 122}	-	x	x	x	-	x	-
Lloyd's Banking Group [96, 201-203]	x ^{c 123}	-	✓ ^c	9,300	✓ ^{c 124}	x	x	-	x	-
NatWest Group PLC [97, 100, 204-207]	✓ ^c	7,474 ^d	✓ ^c	8,298 ^d	✓ ^{c ecl}	x	x	-	x	-
Paragon Banking Group PLC [208, 209]	✓ ^c	5 ^d	✓ ^c	3.6 ^d	x	x	x	-	x	-
TSB PLC [102, 210-212]	✓ ^s	518.8 ^d	✓ ^s	576.8 ^d	x	✓ ^{c 125}				
Virgin Money PLC [213, 214]	x ¹²⁶	-	✓ ^c	809 ^d	x	x	x	-	x	-

Key: ^a approved; ^d drawn down; ^c reported in consolidated accounts of listed parent; ^s reported only in subsidiary financial statements; ^{ecl} expected credit loss by stage; x loan scheme noted, but value not reported; ✓ loan scheme noted and value reported.

¹¹⁹ *Ibid* for other financial statements of subsidiaries within Close Brothers' banking operations examined.

¹²⁰ Value (>£1.14 billion) of loans under CLBILS, CBILS, and BBLS reported as single figure (£1,278.4 million reported as having been approved since April 2020). CBILS loans noted as primary source of exposure. In addition, £144 million across 686 CBILS loans had been credit approved and could be drawn down until 30 November 2021 for asset finance agreements [107].

¹²¹ Value (£213 million) of loans approved under CLBILS, CBILS, and BBLS reported as single figure.

¹²² Value (£213 million) of loans approved under CLBILS, CBILS, and BBLS reported as single figure.

¹²³ Value (£213 million) of loans approved under CLBILS, CBILS, and BBLS reported as single figure.

¹²⁴ Given for loans under all government loans schemes.

¹²⁵ In its Annual Report and Accounts for 2020, TSB reports a £33.2 million post model adjustment for credited impairment losses on loans under the BBLS [212].

¹²⁶ Value of lending (£1.3bn) under all government schemes reported as a single figure.

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Table 3.5: Summary of Reporting of Coronavirus Business Interruption Loan Scheme by Public Limited Company Accredited Lenders and Key Operating Subsidiaries

Company	Value of Loans				Expected credit losses, default risk, credit impairment losses/charges		Government Guaranteed Exposure			
	2021		2020		2021	2020	2021		2020	
	Reported	Value (£m)	Reported	Value (£m)	Reported	Reported	Reported	Value (£m)	Reported	Value (£m)
Barclays PLC [99, 101, 188, 189]	✓ ^c	1,828 ^d	✓ ^c	2,058 ^d	✓ ^{c ecl}	✓ ^{c ecl}	✓ ^c	1,462	✓ ^c	1,647
Close Brothers Group PLC [107, 190-194]	✓ ^{c s 127}	<1,140 ^{c s}	✓ ^{c 128}	<353 ^a	x	-	x	-	-	-
Funding Circle PLC [215-218]	x	-	✓ ^c	1,700 ^d						
HSBC Holdings PLC [98, 104, 195, 196]	x	-	✓ ^s	3,200 ^a	x	x	x	-	x	-
Investec PLC [197-200]	x ¹²⁹	-	x ¹³⁰	-	x	x	x	-	x	-
Lloyd's Banking Group [96, 201-203]	x	-	✓ ^c	2,400	✓ ^{c ecl 131}	x	x	-	x	-
NatWest Group PLC [97, 100, 204-207]	x	-	✓ ^c	3,822 ^d	x	x	x	-	x	-
Paragon Banking Group PLC [208, 209]	✓ ^c	58.0 ^d	✓ ^c	21.6 ^d	x	x	x	-	x	-
TSB PLC [102, 210-212]	x	-	x	-	x	x	x	-	✓	x
Virgin Money PLC [213, 214]	x ¹³²	-	✓ ^c	334 ^d	x	x	x	-	x	-

Key: ^a approved; ^d drawn down; ^c reported in consolidated accounts of listed parent; ^s reported only in subsidiary financial statements; ^{ads} associated debt split; x loan scheme noted, but value not reported; ✓ loan scheme noted and value reported.

¹²⁷ Close Brothers' consolidated accounts report over £1.14 billion of loans under all government schemes (£1,278.4 million reported as approved since April 2020). CBILS loans were noted as primary source of exposure. £144 million across 686 CBILS loans also reported to have had been credit approved for asset finance agreements [107]. Lending under CBILS was also reported across Close Brothers' subsidiaries' financial statements. In its 2021 accounts, for example, Close Leasing Limited reported 80 loans (£53.8 million) approved and drawn with a residual balance of £49.3 million [191].

¹²⁸ Value (£194 million) of loans under CLBILS, CBILS, and BBLS reported as single figure. CBILS loans noted as primary source of exposure. A further £159 million reported as credit approved.

¹²⁹ Value (£213 million) of loans approved under CLBILS, CBILS, and BBLS reported as single figure.

¹³⁰ Value (£213 million) of loans approved under CLBILS, CBILS, and BBLS reported as single figure.

¹³¹ Given for loans under all government loans schemes.

¹³² Value of lending (£1.3bn) under all government schemes reported as a single figure.

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Table 3.6: Summary of Reporting of Coronavirus Large Business Interruption Loan Scheme (CLBILS) by Public Limited Company Accredited Lenders and their Subsidiaries

Company	Value of Loans				Expected credit losses, default risk, credit impairment losses/charges		Government Guaranteed Exposure			
	2021		2020		2021	2020	2021		2020	
	Reported	Value (£m)	Reported	Value (£m)	Reported	Reported	Reported	Value (£m)	Reported	Value (£m)
Barclays PLC [99, 101, 188, 189]	✓ ^c	9,382 ^d	✓ ^c	9,916 ^d	✓ ^{c ecl}	✓ ^{c ecl}	✓	233 ^c	✓	28 ^c
Close Brothers Group PLC [107, 190-194]	x ^{c 133}	-	x ^{c 134}	-	x	x	x	-	x	-
Funding circle PLC [215-218]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
HSBC Holdings PLC [98, 104, 195, 196]	x	-	✓ ^s	1,100 ^a	x	x	x	-	x	-
Investec PLC [197-200]	x ¹³⁵	-	x ¹³⁶	-	x	x	x	-	x	-
Lloyd's Banking Group [96, 201-203]	x	-	✓	700 ^c	✓ ^{c ads 137}	x	x	-	x	-
NatWest Group PLC [97, 100, 204-207]	x	-	✓ ^c	806 ^d	x	x	x	-	x	-
Paragon Banking Group PLC [208, 209]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
TSB PLC [102, 210-212]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Virgin Money PLC [213, 214]	x ¹³⁸	-	✓ ^c	20 ^d	x	x	x	-	x	-

Key: ^a approved; ^d drawn down; ^c reported in consolidated accounts of listed parent; ^s reported only in subsidiary financial statements; ^{ads} associated debt split; x loan scheme noted, but value not reported; ✓ loan scheme noted and value reported.

¹³³ Value of loans under CLBILS, CBILS, and BBLS reported as single figure. CLBILS loans noted as primary source of exposure [107].

¹³⁴ Value (£194 million) of loans under CLBILS, CBILS, and BBLS reported as single figure. CLBILS loans noted as primary source of exposure. A further £159 million reported as credit approved [190].

¹³⁵ Value (£213 million) of loans approved under CLBILS, CBILS, and BBLS reported as single figure.

¹³⁶ Value (£213 million) of loans approved under CLBILS, CBILS, and BBLS reported as single figure.

¹³⁷ Given for loans under all government loans schemes.

¹³⁸ Value of lending (£1.3bn) under all government schemes reported as a single figure.

3.35 Reporting Practices relating to Grants and other forms of Government Assistance under IAS 20

A further problem relates to IAS 20's guidance on how grants should be accounted for and disclosed. The standard provides three alternatives – as part of profit or loss¹³⁹, either separately, or under a general heading such as 'other income', or deducted in reporting the expense to which the grant relates [163]. IAS 20 goes on to stipulate that the 'nature and extent' of grants should also be disclosed.¹⁴⁰ In principle, this second stipulation should ensure that both the value and scheme associated with grant income is specified in financial reports, even where grant income is not presented separately as part of profit and loss.

However, in practice not all companies comply with this latter requirement. Equally, few listed accredited lenders¹⁴¹ appear to have disclosed the 'nature and extent' [163] of payments to cover lender fees (CBILS) and interest payments for the first twelve months (CBILS and BBLS) [21] (**Table 3.7**). This is despite the fact that such fees and interest payments appear to fall within the definition of a grant under IAS 20 in so far as they constitute a '[transfer] of resources...in return for past or future compliance with certain conditions' relating to their operating activities [163].¹⁴²

Table 3.7: Summary of Statements of Disclosure by Public Limited Company Accredited Lenders¹⁴³ for Fees and Interest Paid by the Government (IAS 20)

	Disclosure Statement on Fees and Interest Paid by Government
Barclays PLC [99, 101] + Barclays Bank UK PLC [188, 189]	No statement (2021, 2020)
Close Brothers Group PLC [107, 190] + Close Invoice Finance Ltd [193, 194] + Close Leasing Ltd [191, 192] ¹⁴⁴	No statement (2021, 2020)
Funding Circle PLC [215-218]	No statement (2021, 2020)
HSBC Holdings PLC [104, 195] + HSBC UK Bank PLC [98, 196]	No statement (2021, 2020)
Investec PLC [197, 198] + Investec Bank PLC [199, 200]	No statement (2021, 2020) ¹⁴⁵
Lloyd's Banking Group [96, 201] + Bank of Scotland [202, 203]	No statement (2021, 2020)

¹³⁹ IAS 20 requires government grants to be recognised over the period in which the company recognises expenses for the related costs for which the grants are intended to compensate.

¹⁴⁰ Reporting requirements for grants related to income under FRS 102 are broadly similar [165, 169]. These stipulate that such grants should be recognised as income in the period in which they become receivable within the statement of profit or loss, and be disclosed separately as 'grant income'/'government grant' or under 'sundry income'.

¹⁴¹ **Tables 3.5-3.8** include three listed accredited lenders which were not part of our sample (Funding Circle, TSB, Virgin Money).

¹⁴² We note the possibility that banks' participation in the loan schemes constituted "transactions with government which cannot be distinguished from the normal trading transactions of the entity", which are not covered by IAS 20.

¹⁴³ Including accredited subsidiaries and relevant operating companies.

¹⁴⁴ Other financial statements of subsidiaries within Close Brothers' banking operations examined, include: Capital Lease Solutions Limited; Close Asset Finance Limited; Close Brothers Finance Limited; Finance for Industry; Kingston Asset Leasing Limited; Kingston Asset Finance Limited; Finance for Industry Services Limited,

¹⁴⁵ Investec PLC (2021) and Investec Bank PLC (2021 and 2020) report income from government grants under Other Operating Income. Notes to Investec PLC's and Investec Bank PLC's 2021 Annual Financial Statements suggest that these relate to Research and Development Expenditure Credits and income from the Capability and Innovation Fund [197, 199, 200].

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NatWest Group PLC [97, 100] + Coutts & Company [219] + Royal Bank of Scotland PLC [204, 205] + National Westminster Bank PLC [206, 207]	No statement (2021, 2020)
Paragon Banking Group PLC [208, 209]	Statement ¹⁴⁶ (2020, 2001)
TSB PLC (Banco de Sabadell S.A.) [102, 210-212]	Statement ¹⁴⁷ (2020)
Virgin Money [213, 214]	No statement (2020, 2021)

3.36 Asset-Light Companies

Financial statements also fail to convey the full reliance on government supports of companies characterised by asset-light business models, in which a range of company functions, such as customer service, information technology, and research and development are assigned to other firms.

Examples in our sample included Domino's Pizza Group, itself a franchisee of US Domino's Pizza Inc in the US, and IHG, which, to different degrees, operate fee-based, largely franchised business models. In its 2020 annual report, for instance, Domino's reported that it had voluntarily repaid business rates relief (as well as placing no employees on furlough) for its 'wholly owned corporate stores' to reflect its status as a business that was able to continue trading despite pandemic-related restriction [121]. In practice this applied to just over 3% of UK branded stores [121]. Equally, despite managing 17 hotel brands [174, 175], IHG owns very few hotels and generates most of its revenue through franchise and management contracts [174, 175].¹⁴⁸ The model means that group does not employ people in its franchise hotels, nor control their day-to-day operations, policies or procedures IHG, and is essentially a revenue collection agency for thousands of small businesses.¹⁴⁹ Most of these businesses will have taken advantage of business rates relief and participated in the CJRS, saving these companies many millions in costs (see Chapter 2 for the costs of redundancy for example), and, ultimately, allowing IHG to return to profitability quickly after pandemic related restrictions had lifted. By contrast, IHG's formal reliance on government support looks trifling.

¹⁴⁶ Paragon PLC's Annual Report and Accounts for 2020 and 2021 report 'sovereign receivables' of £200,000 and £900,000 under Sundry Assets. Notes to Sundry Assets indicate that these include 'amounts receivable from the UK Government under the CBILS and BBLS schemes' [208, 209]. Interestingly, elsewhere both reports Paragon also describes its treatment of central bank facilities provided at a below market rate of interest under IAS 20. Specifically, the liability is initially recognised at the value of its expected cash flows discounted at a market rate of interest for a comparable commercial borrowing and that interest is recognised on this liability on an effective rate of interest basis, using the imputed market rate to determine the effective rate of interest. The report goes on to note that the remaining amount of the advance is recognised as deferred government assistance and released to the profit and loss account through interest payable over the periods during which the arrangement affects profit [208, 209].

¹⁴⁷ TSB PLC's Annual Report and Accounts for 2020 and 2021 report £28.5 million due (and then received) from the British Business Bank in respect of the Bounce Back Loan Scheme, which reflects recovery of loan balances previously charged off and customer interest [210, 212].

¹⁴⁸ IHG was first major hotel group to sell most of its hotels. Its owned, leased and managed lease hotels declined from over 180 hotels 20 years ago, to 19 as of 31st December 2021 [174, 175].

¹⁴⁹ Franchised hotels are owned and operated by parties distinct from the brand and pay fees to the brand owner for its use. Managed hotels are operated by a party distinct from both the hotel and brand owner. The owner pays both management fees to the operating party and fees to the brand owner. In practice, IHG generates revenue from its franchised hotels via a fix percentage of room revenue when a guest stays and from its managed hotels via a fixed percentage of total hotel revenue and profit [174, 175].

Chapter 4: The Impact of COVID-Supports on Executive Pay and Shareholder Dividends

Key Findings

Executive Pay: into the pandemic – 2018/19-2020/21

- Prior to the pandemic, average total executive (CEO and CFO) pay had seen consistent annual declines since 2016/17.
- Declines in average executive pay deepened during the peak of the pandemic, driven by falls in bonus and LTIP payments.
- With reference to the relationship between trends in executive pay, its components, and government supports, the picture is mixed. CEOs in FTSE 100 companies that received grants under CJRS, international wage support and which deferred tax experienced a statistically significantly greater decrease in total pay compared to those in FTSE 100 companies that did not receive these supports. However, whether companies received government support or not appears to have had no effect on the extent to which FTSE 100 executive bonuses fell. In fact, the decrease in bonuses was marginally less for CEOs in FTSE 100 companies which arranged financing under CCFE.
- CEOs in FTSE 250 companies in receipt of grants under CJRS and which had arranged financed under CCFE had a significantly greater decrease in total executive pay compared to their counterparts in FTSE 250 companies that did not furlough employees or arrange finance under CCFE. CEOs in FTSE 250 companies in receipt of deferred tax and Business Rates Relief had a marginally significantly greater decrease in total executive pay compared with those in companies that did not receive this support.

Executive pay: coming out of the pandemic – 2021/22

- Executive pay awards at FTSE 350 companies coming out of the pandemic have reversed the pre-pandemic decline in executive pay. Save for one key indicator (mean total pay for CEOs at FTSE 100 companies), the stark reversal in executive pay in 2021/22 took executive pay well beyond pre-pandemic levels.
- The bounce-back in executive pay has been driven by increases in bonuses and LTIP payments. In many respects, increases in bonus pay appear to have been used to claw back losses in executive pay during the pandemic. The mean and median bonus for FTSE 100 CEOs were 51.3% and 50.8% higher on average than those paid out in the year prior to the pandemic. At FTSE 250 companies mean and median CEO bonus pay increased 36.5% and 43.4% over the same period.
- With reference to the relationship between trends in pay and government supports, the data support the idea of a post-pandemic clawback culture among many companies that received government supports.
- CEOs and CFOs in FTSE 100 companies in receipt of grants under CJRS had a significantly higher increase in total pay compared with those in FTSE 100 companies that did not furlough employees. CEOs and CFOs in FTSE 250 companies receiving support under CJRS and deferring tax had a significantly greater increase

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in bonus payments in this period, compared with executives in companies that did not participate in CJRS. Executives at FTSE 250 companies deferring tax also experienced a significantly greater increase in total pay.

- Looking back to the year prior to the introduction of pandemic-related restrictions (2019/20), receipt of grants under CJRS had a positive impact on bonuses received by FTSE 250 executives. Finance arranged under CCFF in 2020 had a positive impact on bonuses received by executives in FTSE 100 companies. There were no positive effects in the models for LTIP, but a negative effect was found in the LTIP models examining the impact of receipt of deferred tax for CEOs and CFOs in FTSE 100 companies.

Dividends: into the pandemic – 2018/19-2020/2021

- In simple numerical terms, dividend payments increased slightly between 2018/19 and 2019/20, but declined sharply with the onset of the pandemic.
- Receipt of government support was not significantly associated with a greater decrease in dividend payments for FTSE 100 and FTSE 250 companies. FTSE 100 companies in receipt of Business Rates Relief made a significantly *higher* dividend payments compared with their counterparts that did not receive this support.

Dividends: coming out of the pandemic – 2019/2020-2021/2022

- In the subsequent 12 months, dividend payments recovered, though not enough to counter the decrease following the onset of the pandemic.
- With reference to the relationship between dividends and government supports, FTSE 100 and FTSE 250 companies in receipt of CJRS grants paid a significantly lower dividend to shareholders than their counterparts that did not receive this support. FTSE 100 companies in receipt of international wage support paid a marginally significantly lower dividend than FTSE 100 companies not in receipt of this support.

4.1 Introduction

This chapter analyses the impact of COVID-supports on executive pay and shareholder dividend payments. The chapter is divided into two major sections. The first section presents a descriptive overview of trends in executive pay and dividends from 2018 to early 2022. This covers the period two years prior to the introduction of pandemic-related restrictions and the first and second years following the beginning of the government's response to the pandemic from March 2020 onwards. The second section presents the results of multivariate analyses examining changes in three key stretches of time within this period in order to ascertain the extent to which receipt of key government supports was associated with how firms reacted and responded to the pandemic (in terms of executive pay and dividend payments), and crucially on the extent to which receipt of government support had any significant impact on these key outcomes.

4.2 Trends in Executive Pay and Dividends to Shareholders: 2018/19-2021/22

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In this section we examine trends in CEO and CFO pay between 2018 and 2022. As the pandemic and most government support took effect towards the end of the 1st quarter (Q1) of 2020, we take the 2nd quarter (Q2) of 2020 as the beginning point for each twelve-month period, working back two years to 2018/Q2 and forward to 2022/Q1. For ease of reading, we refer to these periods as 2018/19, 2019/20, 2020/21, 2021/22. **Table 4.1** shows trends in average (mean and median) total pay (single figure), base salary, benefits, pension, bonuses, and Long-Term Incentive Plans (LTIP) for CEOs and CFOs in FTSE 100 companies. **Table 4.2** shows comparative figures for CEOs and CFOs in FTSE 250 companies. Trends in the median follow those for the mean closely, attention below will primarily focus on the latter to reflect how CEOs and CFOs as a group have fared in the periods under discussion.

4.21 Executive Pay in FTSE 100 Companies

4.211 Into the Pandemic (2018/19-2020/21)

Looking first at FTSE 100 companies in the lead up to and during the peak of the pandemic, **Table 4.1** shows that between 2018/19 and 2019/20, mean/median total pay for CEOs in FTSE 100 companies dropped from £4.98m/£3.77m to £4.52m/£3.15m (-9.3%/-16.7%) and then fell sharply to £3.34m/£2.73m (-26.1%/-13.4%), in 2020/21 as pandemic-related restrictions began to bite. CFO pay also decreased over this period in proportionately comparable terms, falling initially from £2.74m/£2.04m to £2.42m/£1.69m (-11.5%/-17.2%) and then to £1.89m/£1.58m (-22.0%/-6.5%) in 2020/21.

Focusing on specific components of executive pay, base salary remained comparatively stable between 2018/19 and 2020/21 for both CEOs and CFOs in FTSE 100 companies. Contributions paid to CEO and CFO pensions declined by around 21.1%/23.4% and 19.9%/20.7% at the peak of the pandemic (2020/21) compared with the previous 12 months. Benefits and other payments to CEOs and CFOs also decreased over this period, although not consistently for CFOs.

Mean and median bonuses for both CEOs and CFOs declined substantially. Between 2018/19 and 2019/20 and 2020/21 mean/median bonuses paid to CEOs fell progressively from £1.17m/£1.05m to £0.98m/£0.92m (-16.2%/-12.0%) and then to £0.81m/£0.50m (-17.7%/-45.7%). Bonus payments to CFOs are substantially lower than those paid to CEOs, though in proportionate terms bonuses paid to CFOs decreased over the same period to a similar extent.

Decreases in LTIP paid to CEOs and CFOs between 2018/19 and 2020/21 were even more substantial. Between 2018/19 and 2019/20, mean/median LTIP paid to CEOs decreased by 7.5%/7.4% (£2.40m/£1.14m to £2.22m/£1.05m) and between 2019/20 and 2020/21 by 42.9%/37.7%. Over the same period, CFO LTIP payments decreased by 22.4%/36.6% and then by a further 37.1%/31.8%.

Taken together therefore, the decrease in mean total executive pay paid to CEOs and CFOs in FTSE 100 companies between 2019/20 and 2020/21 comprised substantial falls in pension contributions, bonuses, and LTIP.

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Table 4.1: Trends in average pay (£m) paid to CEOs and CFOs in FTSE 100 companies: 2018/19 - 2021/22

		CEO				CFO			
		2018/19	2019/20	2020/21	2021/22	2018/19	2019/20	2020/21	2021/22
Total	Mean	£4.982m	£4.517m	£3.337m	£4.236m	£2.737m	£2.423m	£1.891m	£2.512m
	Median	£3.770m	£3.154m	£2.732m	£3.588m	£2.040m	£1.690m	£1.579m	£2.229m
Basic	Mean	£0.950m	£0.963m	£0.941m	£0.972m	£0.600m	£0.609m	£0.615m	£0.624m
Salary	Median	£0.850m	£0.867m	£0.842m	£0.892m	£0.523m	£0.527m	£0.531m	£0.551m
Pension	Mean	£0.198m	£0.195m	£0.154m	£0.139m	£0.135m	£0.124m	£0.100m	£0.082m
	Median	£0.199m	£0.188m	£0.144m	£0.123m	£0.118m	£0.107m	£0.085m	£0.075m
Benefits	Mean	£0.264m	£0.159m	£0.167m	£0.118m	£0.063m	£0.137m	£0.083m	£0.169m
	Median	£0.045m	£0.039m	£0.042m	£0.033m	£0.025m	£0.023m	£0.022m	£0.022m
Bonus	Mean	£1.170m	£0.980m	£0.806m	£1.480m	£0.648m	£0.551m	£0.462m	£0.827m
	Median	£1.046m	£0.921m	£0.500m	£1.388m	£0.613m	£0.516m	£0.305m	£0.765m
LTIP	Mean	£2.400m	£2.220m	£1.269m	£1.526m	£1.291m	£1.002m	£0.631m	£0.810m
	Median	£1.139m	£1.054m	£0.657m	£0.962m	£0.689m	£0.437m	£0.298m	£0.397m

Source: Company annual reports and accounts, 2018-2022.

4.212 Coming out of the Pandemic

Between 2020/21 and 2021/22, as the economic disruption from the pandemic began to subside, there was a stark reversal in trends in CEO and CFO pay. Compared with the previous 12 months - when economic disruption was at its peak - mean/median total pay increased by 26.9%/31.3% for CEOs and by 32.8%/41.1% for CFOs. On most measures these increases were enough to take average executive total pay beyond pre-pandemic levels. Although CEO mean pay in 2021/22 was 6.2% lower than 2019/20, CEO median pay was 13.8% higher, as were CFO mean and median pay (3.6%/31.9%).

Looking again at specific components of pay, this increase was concentrated in bonuses and LTIP. Focusing first on bonuses, between 2020/21 and 2021/22 mean/median bonuses increased from £0.81m/£0.50m to £1.48m/£1.39m (83.6%/17.7%) for CEOs and from £0.46m/£0.31m to £0.83m/£0.77m (79.0%/150.8%) for CFOs. This took them far beyond their level immediately prior to the pandemic. For CEOs, mean/median bonuses in 2021/22 were 26.5%/32.8% higher than in 2018/2019 and 51.1%/50.8% higher than in 2019/20. For CFOs, mean/median bonuses in 2021/22 were 27.6%/24.9% higher than in 2019/2020 and 50.0%/48.4% higher than in 2019/2020.

In proportionate terms, increases in LTIP payments were broadly similar. For CEOs, mean/median LTIP payments climbed 20.3%/46.5%, whilst for CFOs they increased by 28.4%/33.3%. In contrast to bonuses, LTIP payments in 2021/22 were lower than they were before the economic disruption associated with the pandemic took effect: down 36.4%/15.5% on 2018/19 and 31.2%/8.8% on 2019/20 for CEOs and down 37.3%/42.3% and 19.2%/9.1% for CFOs.

4.22 Executive Pay in FTSE 250 Companies

4.221 Into the Pandemic (2018/19-2020/21)

Turning to FTSE 250 companies, **Table 4.2** shows trends in pay for CEOs and CFOs between 2018/19 and 2021/22. Broadly, trends in total pay mirror those of executives in FTSE 100 companies. The decrease between 2018/19 and 2020/21 was, however, relatively less pronounced. Between 2018/19 and 2019/20, total mean and median CEO pay decreased by 11.2%/13.3% and then a further 9.6%/13.3% between 2019/20 and 2020/21 at the peak of the pandemic.

Over the same periods, decreases for CFOs were 12.7%/3.8% and 9.6%/23.6% respectively. In comparison with FTSE 100 companies, therefore, we do not observe a substantially greater decrease in CEO and CFO pay in the period when the pandemic was having the greatest impact on the economy, compared with the twelve-month period preceding this.

Table 4.2: Trends in average pay (£m) paid to CEOs and CFOs in FTSE 250 companies: 2018/19 - 2021/22

		CEO				CFO			
		2018/19	2019/20	2020/21	2021/22	2018/19	2019/20	2020/21	2021/22
Total	Mean	£2.082m	£1.849m	£1.671m	£2.328m	£1.168m	£1.019m	£0.913m	£1.231m
	Median	£1.724m	£1.495m	£1.296m	£1.802m	£1.002m	£0.964m	£0.737m	£1.002m
Basic salary	Mean	£0.591m	£0.590m	£0.575m	£0.613m	£0.369m	£0.364m	£0.371m	£0.389m
	Median	£0.555m	£0.562m	£0.572m	£0.597m	£0.357m	£0.368m	£0.363m	£0.391m
Pension	Mean	£0.097m	£0.090m	£0.081m	£0.074m	£0.057m	£0.053m	£0.049m	£0.044m
	Median	£0.085m	£0.081m	£0.069m	£0.066m	£0.049m	£0.047m	£0.045m	£0.042m
Benefits	Mean	£0.135m	£0.116m	£0.096m	£0.080m	£0.029m	£0.049m	£0.044m	£0.042m
	Median	£0.022m	£0.021m	£0.023m	£0.022m	£0.017m	£0.017m	£0.017m	£0.016m
Bonus	Mean	£0.615m	£0.576m	£0.452m	£0.787m	£0.363m	£0.307m	£0.230m	£0.422m
	Median	£0.489m	£0.464m	£0.276m	£0.665m	£0.292m	£0.246m	£0.106m	£0.377m
LTIP	Mean	£0.644m	£0.476m	£0.468m	£0.775m	£0.350m	£0.247m	£0.220m	£0.334m
	Median	£0.317m	£0.179m	£0.103m	£0.280m	£0.066m	£0.070m	£0.000m	£0.000m

Source: Company annual reports and accounts, 2018-2022.

Looking at specific components of executive pay, base salary, remained comparatively stable between 2018/19 and 2020/21 for both CEOs and CFOs. Contributions paid to CEO and CFO pensions declined by 6.8%/4.7% and 6.5%/3.5% between 2018/19 and 2019/20 and then by 10.0%/14.8% and 9.7%/4.9% the following year. As with executives in FTSE 100 companies, there were substantial decreases in bonus payments. After falling 6.4%/5.1% between 2018/19 and 2019/20, mean/median CEO bonuses fell 21.6%/40.6%. This matched marginally steeper falls in CFO bonuses which fell 15.3%/15.6% in the first period before dropping by 25.1%/56.9% between 2019/20 and 2020/21.

Average LTIP payments also fell, but with greater variation between the mean and median. Focusing first on mean LTIP, for both CEOs and CFOs the rate of decrease declined from 26.0%/29.4% between 2018/19 and 2019/20 to 1.9%/10.8% between 2019/20 and 2020/21. By contrast, the rate of decrease in median CEO LTIP

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awards remained relatively consistent between 2018/19 and 2019/20 (-43.5%) and 2019/20 and 2020/21 (-42.5%). For CFOs, median LTIP awards increased between 2018/19 and 2019/20 (6.1%) before dropping by 100% between 2019/20 and 2020/21, reflecting the fact that at least 50% of CFOs did not receive an LTIP award during this period.

4.222 Coming out of the Pandemic

As with FTSE 100 companies, there was a stark reversal in the trend in CEO and CFO pay in FTSE 250 companies between 2020/21 and 2021/22. Mean/median total pay increased in by 39.3%/39.1% for CEOs and by 34.8%/35.9% for CFOs. Compared to the period immediately prior to the pandemic (2019/20) mean/median total pay increased by 25.9%/20.6% for CEOs and 20.8%/3.9% for CFOs. On most measures average total pay in 2021/22 was also higher than 2018/19 by 11.8% (mean) /4.5% (median) for CEOs and 5.4% (mean) / 0% (median) for CFOs.

Looking across specific pay components, increases in total pay were concentrated in bonuses and LTIP payments. Looking first at bonuses, between 2020/21 and 2021/22 mean/median bonuses increased by 74.2%/141.3% for CEOs and by 83.6%/255.7% for CFOs. On balance, these increases took bonus payments far beyond pre-pandemic levels. Mean bonuses paid to CEOs and CFOs in 2021/22 were 36.5%/37.4% higher than those paid in 2019/20. The increase in median bonus paid to CEOs and CFOs during this period was higher still, increased 43.4% for CEOs and 53.3% for CFOs. On average bonuses in 2021/22 were also higher than 2018/19, with the mean/median CEO bonus 27.8%/36.1% higher and the mean/median CFO bonus 16.3%/29.3% higher.

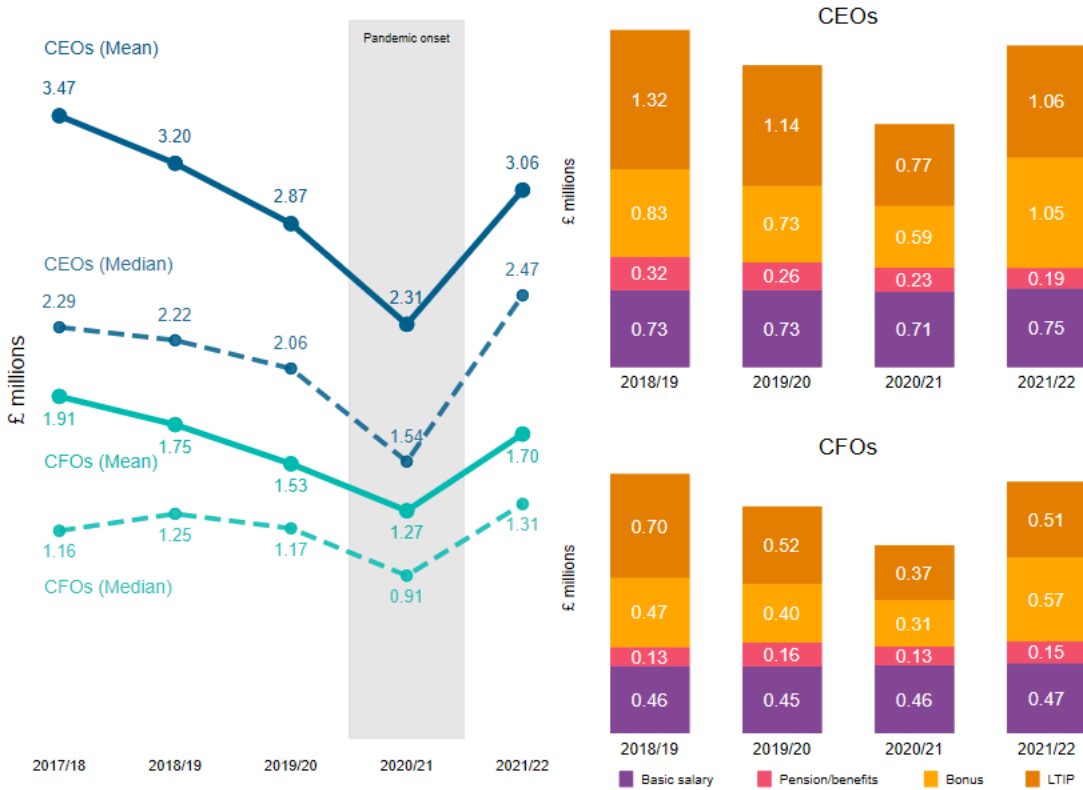
On most measures, there were also large average increases in the LTIP payments to CEOs and CFOs. Between 2020/21 and 2021/22, mean LTIP payments to CEOs and CFOs increased 65.7% and 51.7% respectively. However, whilst the median LTIP payment to CEOs increased by 171.8%, there was no change in the median CFO LTIP payment which was zero for a second successive year. On most measures, these increases took LTIP payments far beyond pre-pandemic levels. Compared to the pre-pandemic period (2019/20), mean/median LTIP payments to CEOs were 62.6%/56.5% higher, and whilst the mean LTIP payment for CFOs was 35.4% higher over the same period, the median was 100% lower, reflecting the fact that the median LTIP award for CFOs in 2021/22 was zero.

4.23 Trends in Executive Pay: Summary

Executive pay at both FTSE100 and FTSE250 companies has largely recovered from the steep falls seen during the peak of the pandemic (**Figures 4.1** and **4.2**). Overall, executives in FTSE 100 companies experienced a sharper decrease in total pay coinciding with the peak of the pandemic combined with a relatively more modest bounce-back in the following year (**Figure 4.2**). By contrast, their counterparts in FTSE 250 companies experienced less of a decrease in total pay between 2019/20 and 2020/21, but with a stronger bounce-back between 2020/21 and 2021/22 (**Figure 4.2**). In both groups, changes in bonuses and LTIP drove these changes, though the pattern of change differed (**Figures 4.1** and **4.2**). For executives in FTSE 100 companies, increases in bonuses were partially offset by decreases in LTIP, whereas for executives in FTSE 250 companies, both bonuses and LTIP increased. For executives at FTSE 250 companies in particular, changes in variable pay have allowed CEOs and CFOs to claw-back most of the losses endured during the peak of the pandemic and arrest the short-run decline (since 2017/18) in executive pay (**Figures 4.1** and **4.2**).

Figures 4.3 and 4.4 depict descriptive data for companies that took support. The data suggest that the bounce-back in total mean pay between both 2020/21 and 2021/22 and 2019/20 and 2021/22 was greater among companies that took support compared to all FTSE 350 companies in our sample (Figure 4.3). However, in proportionate terms, the rebound in median pay among companies that received support was subdued relative to all FTSE 350 companies.

Figure 4.1: Trends in Mean and Median CEO and CFO Pay 2017/18-2021/22 (FTSE 350)



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Figure 4.2: Trends in Mean CEO and CFO Pay 2017/18-2021/22 (FTSE 100 and FTSE 250 disaggregated)

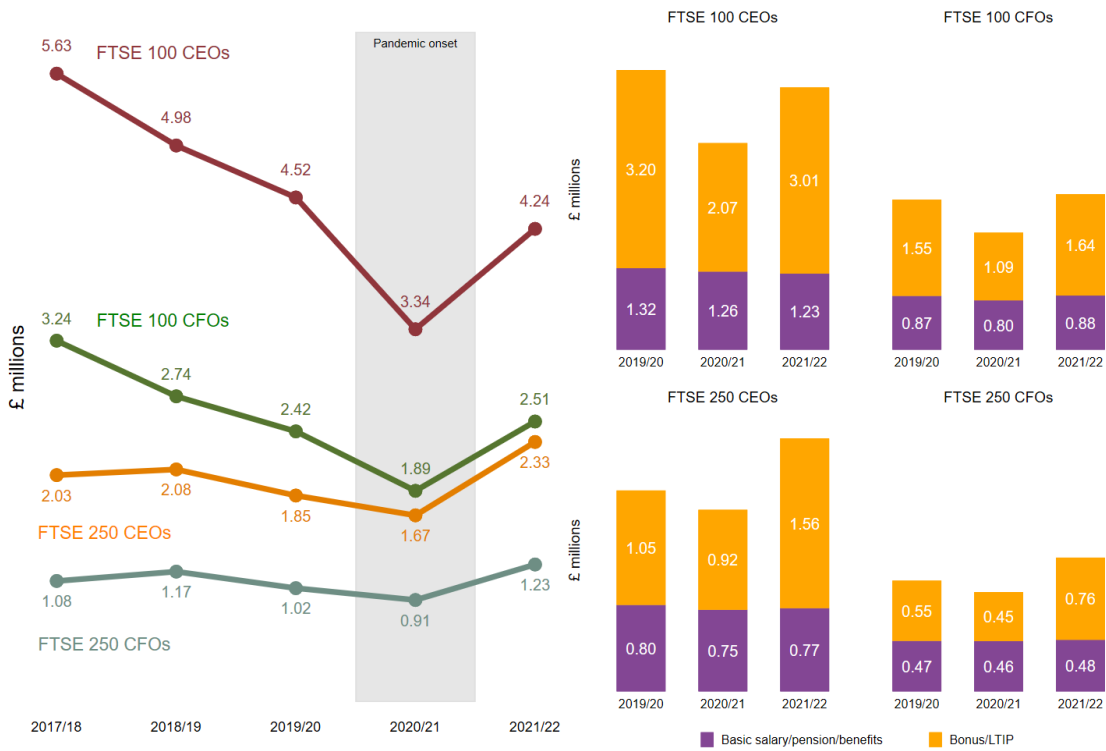


Figure 4.3: Trends in Mean and Median CEO and CFO Pay 2017/18-2021/22 at Companies that took Support only (FTSE 350)

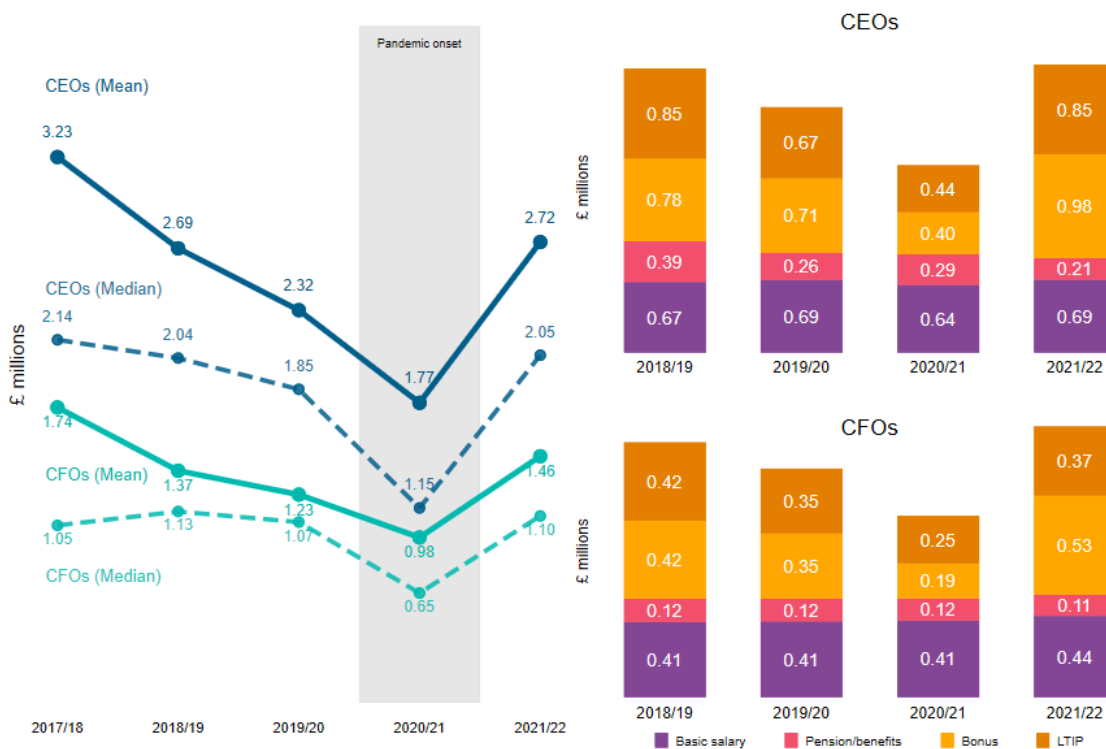
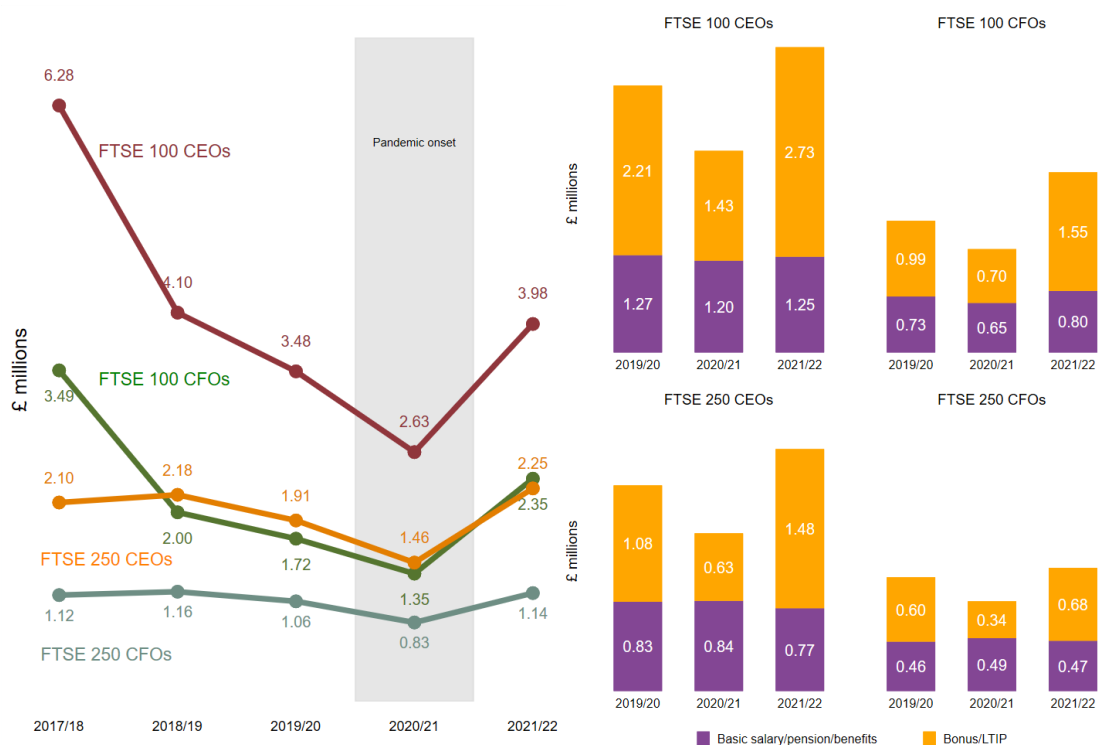


Figure 4.4: Trends in Mean CEO and CFO Pay 2017/18-2021/22 at Companies that took Support only (FTSE 100 and 250 disaggregated)

4.24 Trends in Shareholder Dividends

Table 4.3 reports the average (mean and median) amount dividends paid out to shareholders by FTSE 100 and FTSE 250 companies over four years from 2018/19 to 2021/22. Dividend payments increased slightly between 2018/19 and 2019/20, but, as with executive pay, there was a substantial decrease in dividend payments coinciding with the onset of the pandemic. In FTSE 100 companies, dividends decreased by around 16.7% in 2020/21 compared with the previous 12 months.

Table 4.3: Trends in average shareholder dividends paid (£ '000s) by FTSE 100 and FTSE 250 companies: 2018/19 - 2021/22

		2018/19	2019/20	2020/21	2021/22
FTSE-100	Mean	1,007,238	1,172,010	977,613	1,093,466
	Median	311,700	338,000	280,000	304,750
FTSE-250	Mean	82,353	83,058	52,364	70,712
	Median	42,050	54,000	34,263	43,960

Source: FAME, Moody's Analytics

In proportionate terms, the decrease was greater in FTSE 250 companies (decreasing by 40%), though dividend payments are considerably lower in absolute amounts in these companies compared with FTSE 100 companies. In the subsequent 12 months, dividend payments recovered, though not sufficient to counter fully the decrease following the onset of the pandemic. As a consequence, dividend payments in the 2021/22 period were less than they were in the 2019/20 period prior to the pandemic.

4.3 Multivariate Analysis of Trends in Executive Pay and Shareholder Dividends: exploring the Impact of Government Covid-Supports

This section turns to examine the extent to which changes in CEO and CFO pay and shareholder dividends differed between companies that received government support in response to the pandemic and those that did not, and the extent to which that support helped companies absorb the shock and return executive pay and dividends back to pre-pandemic levels. To explore this, multivariate regression analysis was used to test differences in changes in executive pay and dividend payments for companies receiving different forms of support in 2020 compared with those that did not receive support in 2020. Specifically, the analysis focused on three two time-period comparisons.

The first part of the analysis compares change between 2020/21 (2020/q2 to 2021/q1) and the prior 12-month period 2019/20 (2019/q2 to 2020/q1). This covers the period leading into the pandemic. The analysis examines whether the impact of the onset of the pandemic affected companies receiving support to a greater or lesser extent than companies that did not receive support.

The second part of the analysis compares change between 2020/21 (2020/q2 to 2021/q1) and 2021/22 (2021/q2 to 2022/q1), covering the second 12-month period following the onset of the pandemic. The impact of the pandemic on the economy was still significant during this period, so it does not represent a time 'after' the pandemic. Nonetheless, by 2021/22 the economy and corporate revenues had begun to recover considerably and the most economically disruptive period of the pandemic had effectively passed. The analysis here examines how executive pay at and dividends paid by companies receiving support compared to pay and dividend pay-outs at companies that did not receive support.

The third part of the analysis compares changes before the onset of the pandemic (2019/20) and the 12-month period after the most disruptive effects of the pandemic on the economy (2021/22). As noted above, this latter period does not cover a time 'after' the impact of the pandemic on the economy. A further issue relevant to the analysis is that receipt of support was non-random. Some schemes, such as CJRS were widely available, whilst other schemes, such as Business Rates Relief, were sector specific (see Chapter 2). Due to this, it is difficult to ascertain whether there was a causal link between receipt of support and the outcomes considered here. The counterfactual would be a firm that needed support but was not able to obtain it, and with the available data it is not possible to identify such firms. The analysis here is therefore tentative in terms of assessing fully the impact of government support on subsequent outcomes relating to executive pay and dividend payments.

To summarise, the analysis addresses three key questions:

1. Compared with companies that did not receive government support, did companies receiving support experience a greater or lesser drop in executive pay and dividends following the onset of the pandemic?
2. Compared with companies that did not receive government support, did companies receiving support experience a greater or lesser recovery in executive pay and dividends after the first year of the pandemic?
3. Looking at the period after the first year of the pandemic compared with the 12-month period prior to the onset of the pandemic, did receipt of government support have any effect on executive pay and shareholder dividends?

4.31 Estimation Approach

A random-effects regression difference-in-difference model was estimated to address questions 1 and 2. A fixed-effects difference-in-difference model was estimated to address question 3. The dependent variables in all regression models for executive pay are total executive pay and each of its constituent elements: base salary, pension, benefit, bonuses and LTIP. We estimate separate models for total executive pay and each of these components for CEOs and CFOs in FTSE 100 and FTSE 250 companies. Following the financial economics literature on executive pay, these measures are log-transformed prior to estimating the models. In addition to modelling executive pay, models for dividend payments (log-transformed) are estimated again separately for FTSE 100 and FTSE 250 companies.

The key independent variables in the models are dummy variables indicating the time period, and dummy variables indicating whether or not a company received a government support. In the random-effects models, dummy variables are entered to capture the 12-month period covering the onset of the pandemic (2020/2021) and the 12-month period following this (2021/2022). The reference time period is 2019/2020 which covers the 12-month period prior to the introduction of most government support schemes. For the fixed-effects models (addressing question 3 above) we omit data covering the 12-month period during the peak of the pandemic (2020/2021).

With respect to supports, the analysis focuses on five different schemes that company annual reports indicate were most widely used. These are CJRS, overseas job retention and wage support schemes (international wage support schemes), deferred tax, Business Rates Relief (BRR), and financing arranged under CCFF. The most common form of support was grants under CJRS with around 32% of firms reporting receipt of this support (excluding cases where receipt of this support could not be established). Just under one fifth of firms reported receipt of support under international wage support schemes, and around 10% reported receiving support in the form of deferred tax, BRR, and financing arranged under CCFF. Separate models were estimated for each of these forms of support.

To identify differences in changes to executive pay between companies that received support and those that did not, the random-effects models include an interaction between time-period and receipt of support. This allows for the tests comparing differences in change in pay associated with receipt of government COVID-support. The interaction between receipt of support and the third time period dummy (2021/22) provides, furthermore, a random-effect difference-in-difference estimate of the possible impact of COVID-support on pay in this period compared with the 12-month period prior to the introduction of government restrictions, which depressed economic activity. The fixed-effects difference-in-difference estimator is regarded as superior, however, as it avoids the potentially confounding impact of unobserved time-invariant characteristics. As noted above, with respect to ascertaining the impact of COVID-support the analysis is tentative, and exploratory, and therefore results from both approaches are presented for completeness.

All regression models for pay and its components control for several factors known to be associated with executive pay [220]. To capture the influence of firm size, models control for annual turnover and number of employees. To capture firm performance, all models include a measure of Tobin's Q and a measure of return-on-assets (ROA). In addition, all models include a dummy variable indicating if there was a change in CEO or CFO in any 12-month reporting period. The random-effects models also include a set of dummy variables to capture the effect of industrial sector. In addition to these controls, the models for shareholder dividends reported on below also control for EBITDA and a measure of return-on-equity (ROE) [221-224].

4.32 Results Overview

Regression output for random-effects models of CEO and CFO executive pay in FTSE 100 companies is reported in **Tables A4.1-A4.9** (Appendix 4) and regression output for random-effects models of shareholder dividends in FTSE 100 companies is reported in **Table A4.10** (Appendix 4). The regression output for random-effects models of CEO and CFO executive pay in FTSE 250 companies is reported in **Tables A4.11-A4.20** (Appendix 4). The regression output for random-effects models of shareholder dividends in FTSE 100 companies is reported in **Table A4.21** (Appendix 4). Lastly, estimates of the average treatment effect of the treated (ATET) from fixed-effects difference-in-difference models of CEO and CFO executive pay in FTSE 100 and FTSE 250 companies is reported in **Tables A4.22-27** (Appendix 4). ATET estimates for shareholder dividend models are reported in **Table A4.28** (Appendix 4).

4.33 Change between 2019/20 and 2020/21: the Height of the Pandemic

4.331 Executive Pay

As reported above (**Tables 4.1** and **4.2**), there were significant decreases in bonus and LTIP payments in the year pandemic-related restrictions took effect (2020/21). Following estimation of the random-effects models, tests of simple contrasts were performed to examine whether the decrease varied between companies receiving support and those that did not. Specifically, interest lay in determining if the former experienced a greater decrease in these elements of executive pay. **Table 4.4** provides a summary of the substantive results for CEOs and CFOs in FTSE 100 companies, and **Table 4.5** provides a summary of the substantive results for CEOs and CFOs in FTSE 250 companies.

For both CEO and CFOs in FTSE 100 companies, there was no significant difference in the change (decrease) in bonuses in the 12-month period following the onset of the pandemic. One marginal exception related to financing arranged under CCFF which was positively associated with bonuses suggesting that the decrease in bonuses was marginally less for CEOs in FTSE-100 companies in receipt of this support. For CFOs there was also no significant difference in the change (decrease) in LTIP associated with receipt of any support. CEOs in companies receiving grants under CJRS and deferred tax, however, experienced a marginally significantly greater drop in LTIP compared with their counterparts in companies that did not receive these supports.

Summary results in **Table 4.5** present a broadly similar picture for CEOs and CFOs in FTSE 250 companies. In most cases, there were no significant difference in the change (decrease) in bonuses in the 12-month period following the onset of the pandemic, for either CEOs or CFOs. There was a marginally significant negative effect in the model for bonuses linked to deferred tax for CEOs. CEOs in companies receiving Business Rates Relief, experienced a marginally significantly greater drop in LTIP compared with their counterparts in companies that did not receive these supports. CFOs in companies receiving international wage support and which arranged finance under CCFF experienced a significantly greater drop in LTIP compared with their counterparts in companies that did not receive these supports.

These results suggest that the decrease in bonus payments occurred across FTSE-350 companies with no significant difference between those companies that received support and those that did not. In other words, receipt of support did not necessarily coincide with a significantly greater drop in bonus payments for CEOs or CFOs. This was the case, however, to an extent with LTIP though there were differences between FTSE 100 and FTSE 250 companies in the forms of support where this difference was found.

Table 4.4: Summary of interactions comparing change in bonuses and LTIP between 2019/20 and 2020/21 for companies receiving support compared with companies not receiving support: CEOs and CFOs in FTSE 100 companies

Support type	FTSE-100			
	CEO		CFO	
	Bonus	LTIP	Bonus	LTIP
CJRS	NS	-ive ⁺	NS	NS
International wage support	NS	NS	NS	NS
Business Rates Relief	NS	NS	NS	NS
Deferred tax	NS	-ive ⁺	NS	NS
CCFF	+ive ⁺	NS	NS	NS

Note: -ive = companies receiving support had a significantly greater decrease in executive pay than companies that did not receive support); NS=No significant difference in change in executive pay associated with receipt of support; *** p < .001; ** p < .01; * p < .05; + p < .1

Table 4.5: Summary of interactions comparing change in bonuses and LTIP between 2019/20 and 2020/21 for companies receiving support compared with companies not receiving support: CEOs and CFOs in FTSE 250 companies

Support type	FTSE-250			
	CEO		CFO	
	Bonus	LTIP	Bonus	LTIP
CJRS	NS	NS	NS	NS
International wage support	NS	NS	NS	-ive [*]
Business Rates Relief	NS	-ive ⁺	NS	NS
Deferred tax	-ive ⁺	NS	NS	NS
CCFF	NS	NS	NS	-ive [*]

Note: -ive = companies receiving support had a significantly greater decrease in executive pay than companies that did not receive support); NS=No significant difference in change in executive pay associated with receipt of support; *** p < .001; ** p < .01; * p < .05; + p < .1

In addition to a significantly greater decrease in LTIP, CEOs in FTSE 100 companies that received grants under CJRS had a significantly greater decrease in base salary and total executive pay compared to their counterparts in FTSE 100 companies that did not furlough employees or receive other supports. There was a similar result in the models for receipt of international wage support and deferred tax, though the coefficients in the models for base salary were not significant (the coefficients in the models for total executive pay were significant at conventional levels).

As with those in FTSE 100 companies, CEOs in FTSE 250 companies in receipt of grants under CJRS also had a significantly greater decrease in base salary and total executive pay compared to their counterparts in FTSE 250 companies that did not furlough employees. CEOs in FTSE 250 companies in receipt of deferred tax had

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a marginally significantly greater decrease in total executive pay compared with those in companies that did not receive this support. As noted above, this was concentrated in a marginally significant negative effect in the model for bonuses. There was also a marginally significant negative effect on total executive pay in the models for Business Rates Relief for CEOs in FTSE 250 companies. In both cases this was concentrated in LTIP as reported in **Table 4.6** above. Finally, there was a significant negative effect on total executive pay in the models for CCFF for CEOs in FTSE 250 companies. There were no further statistically significant results in the models of other elements of CFO remuneration in FTSE 100 and FTSE 250 companies.

4.332 Share Dividends

Receipt of support was not significantly associated with a greater decrease in dividend payments for FTSE 100 and FTSE 250 companies. FTSE 100 companies in receipt of Business Rates Relief made a significantly *higher* dividend payment compared with their counterparts that did not receive this support.

4.34 Change between 2020/21 and 2021/22: the Year following the Peak of the Pandemic

4.341 Executive Pay

Following the decrease in bonus and LTIP payments during the peak of pandemic-related restrictions, pay recovered in the next year (see **Tables 4.1** and **4.2**). There was no difference in the change of bonus and LTIP payments given to CEOs and CFOs in FTSE 100 companies associated with receipt of any government support (see **Table 4.6**). **Table 4.7** provides a summary of the results for FTSE 250 companies. It shows that both CEOs and CFOs in companies receiving support under CJRS experienced a significantly greater increase in bonus payments in this period, compared with their counterparts in companies that did not receive CJRS grants. There was also a positive association, again relating to bonus payments, with receipt of deferred tax. This applied to both CEOs and CFOs though the contrast was marginally significant for the former. There were no significant results linking receipt of any support to increases in LTIP in this period.

The positive association between bonus payments and deferred tax for CEOs and CFOs in FTSE 250 companies (see **Table 4.7**) underpinned a significant positive increase in total pay for these executives in comparison with those in FTSE 250 companies that did not receive this support. However, this was marginally significant for CEOs in FTSE 250 companies.

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Table 4.6: Summary of interactions comparing change in bonuses and LTIP between 2019-20 and 2020-21 for companies receiving support compared with companies not receiving support: CEOs and CFOs in FTSE 100 companies

Support type	FTSE-100			
	CEO		CFO	
	Bonus	LTIP	Bonus	LTIP
CJRS	NS	NS	NS	NS
International wage support	NS	NS	NS	NS
Business Rates Relief	NS	NS	NS	NS
Deferred tax	NS	NS	NS	NS
CCFF	NS	NS	NS	NS

Note: +ive = companies receiving support had a significantly greater increase in executive pay than companies that did not receive support); NS=No significant difference in change in executive pay associated with receipt of support; *** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .1$

Table 4.7: Summary of interactions comparing change in bonuses and LTIP between 2019-20 and 2020-21 for companies receiving support compared with companies not receiving support: CEOs and CFOs in FTSE 250 companies

Support type	FTSE-250			
	CEO		CFO	
	Bonus	LTIP	Bonus	LTIP
CJRS	+ive**	NS	+ive**	NS
International wage support	NS	NS	NS	NS
Business Rates Relief	NS	NS	NS	NS
Deferred tax	+ive+	NS	+ive*	NS
CCFF	NS	NS	NS	NS

Note: +ive = companies receiving support had a significantly greater increase in executive pay than companies that did not receive support); NS=No significant difference in change in executive pay associated with receipt of support; *** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .1$

4.342 Share Dividends

In the year following the peak of the pandemic, dividend payments increased, but FTSE 100 companies in receipt of CJRS grants, international wage support, and Business Rates Relief paid a significantly lower dividend to shareholders than their counterparts that did not receive these supports. There were no significant differences in FTSE 250 companies.

4.35 **Change between 2019/20 and 2021/22: before and ‘after’ the Beginning of the Pandemic and Receipt of Supports in 2020**

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This final section presents the results of the fixed-effects difference-in-difference models comparing change between the second year of the pandemic and the 12-month period immediately prior to the pandemic (2019/20). The results show a positive effect in the model for bonuses for CEOs and CFOs in FTSE 250 companies receiving grants under CJRS in 2020, suggesting that receipt of grants under CJRS had a positive impact on bonuses received by executives in these companies. This was also found in the random-effects difference-in-difference models for CEOs and CFOs in FTSE 250 companies. The results also show a positive effect in the model for bonuses for CEOs and CFOs in FTSE 250 companies with finance arranged under CCFF in 2020, suggesting that receipt of this support had a positive impact on bonuses received by executives in FTSE 250 companies. Finally, there was a marginally significant positive effect bonuses paid to CFOs in FTSE 250 companies associated with receipt of deferred tax.

There were no positive effects in the models for LTIP, but a negative effect was found in the LTIP models examining the impact of receipt of deferred tax for CEOs and CFOs in FTSE 100 companies. The effect of receipt of deferred tax on LTIP was negative and significant, suggesting that receipt of this support had a negative impact on this aspect of executive pay (a marginally significant negative effect was found in the random-effects difference-in-difference models). It was reported above that CEOs in FTSE 100 companies in receipt of deferred tax had a marginally significantly greater drop in LTIP (see **Table 4.5**), but that the increase in the following year was not significantly greater (see **Table 4.7**). This element of executive pay takes a longer time horizon into consideration, and it may be that there are lingering effects from the initial impact of the pandemic on this element of executive pay.

There was a positive effect in the model for pensions for CEOs and CFOs in FTSE 100 companies in receipt of grants under CJRS (marginally significant for CFOs). In addition to this, there was a positive effect on CFO pension payments in FTSE 100 companies in receipt of international wage support and Business Rates Relief. There were no significant effects associated with the receipt of any support in the model for pensions for CEOs and CFOs in FTSE 250 companies.

Chapter 5: Employee Pay, CEO-Employee Pay Ratios and COVID-19-Supports

Key Findings

Validity of Pay Ratio Data

- Analyses of trends in pay ratios and employee pay quartiles (pay ratio data) need to be interpreted with reference to the underlying validity and reliability of pay ratio data.
- Many company narratives outlining how CEO-employee pay ratios (pay ratios) are calculated are superficial and opaque. This creates considerable challenges in confirming the validity of firm-level pay ratio data. In the case of firms participating in the Coronavirus Job Retention Scheme, many companies failed to explain how furloughed employees were treated in pay ratio calculations.
- Despite these challenges, we found that companies varied in whether they included or excluded furloughed employees in their pay ratio calculations. Excluding employees on furlough leave from pay ratio calculations will, on balance, have inflated lower, median, and upper quartile pay and compressed pay ratios. This frustrates several major objectives of pay ratio data – making comparisons within the same company over time and between different companies and industrial sectors.
- Companies' exclusion of furloughed employees is often justified on the basis of the accounting concept of consistency. This concept aims to facilitate comparisons between underlying data (in this case employee pay quartiles and pay ratios) over time. However, by ignoring effective reductions in employee pay, the approach devalues pay ratio data as an indicator of how listed companies potentially drive income inequality.
- Companies with the greatest increases in employee quartile pay between 2019 and 2022 had frequently either disposed of their UK operations or made significant redundancies. Major movements in reported employee quartile pay data appear to reflect major movements in employees, rather than their pay. The sensitivity of pay ratio data to changes in employee composition debases their value as a method for tracking firm and sector-level income inequalities.
- Pay ratio data can obscure unscrupulous employment practices. Several companies accused of 'fire and rehire' practices during the pandemic posted some of the highest annual increases in lower quartile and median employee pay.

Employee Quartile Pay

- Notwithstanding major questions relevant to the validity and reliability of pay ratio data, mean lower, median, and upper quartile pay generally dropped in 2020/21, when pandemic-related economic disruption was at its peak. By 2021/22 mean and median lower, median and upper quartile pay had increased beyond pre-pandemic levels.
- These broad trends conceal differences between sectors and between companies dependant on how they engaged with government support. Between 2019/20 and 2021/22, for example, average lower quartile employee pay decreased in the construction (median only), administrative and support service

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activities, human health and social work activities, and arts, entertainment and recreation. Similarly, in proportionate terms, mean increases in lower quartile pay between 2019/20 and 2021/22 for companies that did not participate in CJRS were almost 4 times greater than companies that did participate in CJRS. Further, whilst the mean and median for lower and median quartile and median pay was lower in 2021/22 than 2019/20 for companies that retained grants under CJRS, they were higher for companies that retained grants under CJRS.

Pay Ratios: into the pandemic – 2019/20-2020/21

- Pay ratios at all levels of the employee pay distribution decreased substantially in the first year of the pandemic compared with the preceding year, as CEO pay fell in the same period.
- In proportionate terms, the decrease in pay ratios were larger in FTSE 100 companies than in FTSE 250 companies. The median pay ratio, for example, decreased by 42% in FTSE 100 companies, compared with 29% in FTSE 250 companies.
- Among FTSE 250 companies, receipt of CJRS grants was associated with a greater decrease in the pay ratio taken at the median and upper quartiles, receipt of Business Rates Relief was associated with a greater decrease in the pay ratio taken at the lower, median and upper quartiles, deferred tax was significantly associated with a greater decrease in the upper pay ratio.

Pay Ratios: coming out of the pandemic – 2021/22

- Pay ratios increased in the year in which the economy began to re-open (2021/22).
- Although mean pay ratios at FTSE 100 companies did not increase to an extent that they matched or exceeded pay ratios in the year prior to the peak of the pandemic (2019/20), median pay ratios did return to pre-COVID levels. When extremes are excluded (Ocado Group, 2019/2020) mean pay ratios in FTSE 100 companies in 2019/20 were similar to 2021/22.
- In proportionate terms the increase in FTSE 250 companies was greater. Pay ratios were higher in 2021/22 than in 2019/20. When extremes are excluded (Carnival, 2021/22), mean pay ratios in 2021/22 remain above that in 2019/20, though differences are lower for the lower and median quartile pay ratios.
- The increase in the upper quartile pay ratio was significantly greater for FTSE 100 companies that received grants under CJRS and international wage support.
- Receipt of Business Rates Relief was associated with a greater increase in the pay ratio taken at the median and upper quartiles (with a marginally significant result for pay ratios taken at the lower quartile).
- Finance arranged under CCFF was significantly associated with a greater increase in the pay ratio taken at the lower, median, and upper quartiles in FTSE 100 companies.
- Among FTSE 250 companies, receipt of CJRS grants, deferred tax and Business Rates Relief was significantly associated with a greater increase in the pay ratio at the lower, median, and upper quartiles.
- There were generally no significant effects in differences in pay ratios between 2019/20 and 2021/22. The sole exception relates to FTSE 100 companies that had arranged finance under CCFF, where there was a positive and significant effect indicating that pay ratios increased to a significantly greater extent in FTSE 100 companies receiving this support in comparison with those who did not.

5.1 Introduction

In this chapter, we present descriptive data based on CEO-employee pay ratios (hereafter pay ratios), which most listed companies have been required to publish since 2020.¹⁵⁰ Despite their limitations, the data represent the best source of information on income inequalities within companies. Companies are required to publish the ratio of their CEO's Single Total Figure of Pay to the 25th, 50th, and 75th percentile total pay¹⁵¹ of their full-time equivalent (FTE) UK employees (hereafter lower, median, and upper quartile pay or employee quartile pay, or pay thresholds) [225, 226]. In addition to providing trend data on income inequalities within companies, this requirement also enables the total pay and benefits of lower, median, and upper quartiles to be calculated where they are not reported and compared across companies and over time.

The chapter is split into three sections. In the first section, we explore the underlying methodology and reliability of the data as a method of tracking pay fairness and income inequalities and present several short case studies of companies' accused of seeking to 'fire and rehire' employees and reporting major shifts in employee quartile pay. In the second section, we focus on trends in lower, median and upper quartile pay, examining differences in pay data between companies that did and did not receive government support. The third section focuses on pay ratio data and presents the results of multivariate analysis examining the extent to which receipt of key government supports was associated with changes in pay ratios. We again examine differences in pay ratio data between companies receiving and not receiving government. As with chapters two and four, and unless otherwise stated, we take the 2nd quarter (Q2) as the beginning point of each twelve-month period to take account of the fact that the pandemic and most government support took effect towards the end of the 1st quarter (Q1) in 2020. For ease of reading, however, we refer to these periods as 2018/19, 2019/20, 2020/21 and 2021/22.

5.2 Validity and CEO-Employee Pay Data

The requirement that companies report pay ratio data was originally introduced as part of a package of measures aimed at 'mak[ing the] economy work for everyone' by 'getting tough on irresponsible behaviour in big business' [227]. In a speech to launch her campaign for the Conservative Party leadership in 2016, Theresa May, introduced the requirement as a way of addressing the 'irrational, unhealthy and growing gap between what [FTSE] companies pay their workers and what they pay their bosses' [227]. On this reasoning, pay ratio reporting aims to encourage firms to reward people fairly and to assist broader efforts to manage the role that large companies play in driving income inequalities.

Data validity is central to these ends, allowing employee quartile pay and pay ratios (hereafter pay ratio data) to be compared within the same company over time, between companies in the same sector, and across industrial sectors. In this section, we examine four characteristics of pay ratio data relevant to these issues and the general question of data reliability: a) the method of calculating pay ratio data; b) the effect of

¹⁵⁰ UK incorporated companies with more than 250 UK employees quoted on the UK Official List, the New York Stock Exchange, NASDAQ, or a recognised stock exchange in the European Economic Area.

¹⁵¹ In this chapter, we use the term pay. The Companies (Miscellaneous Reporting) Regulations 2018 uses the term pay and benefits. This includes salary, fees, taxable benefits, annual bonus, share based or other pay from performance, and pension benefits [225].

corporate restructuring and redundancies on employee quartile pay; c) the exclusion of furloughed workers from pay ratio calculations; d) the practice of privileging notional or abstract pay above actual pay.

5.21 Method of Calculation and Validity

Companies are given three alternative methods for reporting pay ratio data under the relevant regulations – Options A, B, and C. Option A is considered to be the most statistically accurate method [225, 226] and involves companies determining the total full-time equivalent (FTE) pay of all UK employees for the relevant financial year, ranking employees based on their total FTE pay from low to high, and then identifying employees whose pay places them at the 25th, 50th and 75th percentile points [225].

Options B and C offer greater flexibility in calculating pay ratios.¹⁵² Both options allow companies to identify three UK employees at the 25th, 50th and 75th percentile points on an ‘indicative basis’, without having to identify and rank the total pay and benefits of their UK employees [225]. For Option B, companies can use their gender pay gap data [228, 229] to identify employees at the three percentile points, whereas for Option C companies can use other existing pay data – either as an alternative or in addition to gender pay gap data – provided the data was gathered no later than the financial year prior to the reporting financial year [225].

Table 5.1 outlines companies’ reliance on the three methods used to report pay ratio data between 1st April 2019 and 31st March 2022. Option A is used with greater frequency (69.2%), than options B (25.6%) and C (5.2%). In addition, a minority of companies (n=11) used a combination of methods.¹⁵³

Table 5.1: Company use of Pay Ratio Methodologies Options A, B, and C: 2019/20-2021/22

	Pay Ratio Methodology						
	Option A		Option B		Option C		Total
	N	%	N	%	N	%	N
2019/20	118	67	46	26.1	12	6.8	176
2020/21	153	70.2	55	25.2	10	4.6	218
2021/22	151	69.9	55	25.5	10	4.6	216
2019/20-2021/22	422	69.2	158	25.6	32	5.2	610

Source: FTSE 350 company annual reports and accounts, 2019-2022

The method of calculation selected can have a considerable impact on reported pay ratio data. This can be observed where companies switch between methods of calculation and update past pay ratio data using the newly selected methodology. **Table 5.2** presents two sets of 2019 pay ratio data for Macclesfield based manufacturer, Bodycote. The first set of figures, published in its 2019 annual report, were produced using option B [233]. The second set represent updated figures published in its 2020 annual report, using option A

¹⁵² The availability of options B and C are designed to take account of the challenges that firms with multiple payroll systems and subsidiaries may face in using option A.

¹⁵³ Justifications for the use of each method varied. Most companies selected option A on the basis that it represented the most statistically accurate method for calculating the three ratios. Companies selected option B for a wider range of reasons. Several companies cited the fact that their payroll systems or ‘complexity of the group’ did not readily lend themselves to identifying lower, median and upper quartile employee compensation [230, 231]. By contrast, Mitchells and Butlers cited ‘high levels of team member turnover’[171], whilst the Mite Group PLC simply justified use of option B on the grounds of ease of calculation, already having ‘readily available data’ for gender pay gap reporting that ‘did not require additional analysis into the more than 45,500 UK employees employed by the Group’ [232].

[234]. The differences between employee quartile pay and pay ratios are marked: lower and upper quartile pay in the revised data, for example, are 18.5% greater and -37.8% less respectively.¹⁵⁴

Table 5.2: Bodycote PLC Pay Ratio Data: reporting year 2019

	Pay Ratios			Employee Quartile Pay		
	Lower Quartile Pay Ratio	Median Quartile Pay Ratio	Upper Quartile Pay Ratio	Lower Quartile Employee Pay	Median Quartile Employee Pay	Upper Quartile Employee Pay
Option B	33	18	10	£22,379	£41,424	£74,341
Option A	70	55	40	£26,512	£33,685	£46,206
% Change	-27.1%	5.8%	37.9%	18.5%	-18.7%	-37.8%

Source: Bodycote Annual Report and Accounts 2019, 2020

5.22 Corporate Restructuring, Redundancies, and Pay Ratio Data

Only UK employees who have a contract of service with the company are considered in pay ratio calculations. Contractors and consultants who may also contract for services to other companies are not included nor are agency staff who do not contract directly with the company but remain contracted with the agency [225, 226]. Consequently, companies that outsource certain operations or who rely on self-employed contractors can end up with quartile employee pay and ratio data which do not fairly reflect the position of their business within the broader set of economic relationships that shape income inequalities.

Equally, annual changes in the composition of UK employees can also have major effects on employee quartile pay and pay ratios. Such changes can occur through major corporate restructuring – which may involve mergers or the disposal or relocation of operations [236] – or through ongoing corporate redundancies. The precise impact of restructuring and redundancies on employee composition is highly contextualised. Redundancies across all levels of an organisation, for instance, are less likely to influence employee composition than those which disproportionately target employees in lower or higher wage bands. In the absence of data underlying the identification of pay thresholds, understanding the impact of changes in the composition of the UK workforce on reported pay ratio data is deeply problematic.

At one level, the sensitivity of pay ratio data to changes in workforce composition is anticipated by The Companies (Miscellaneous Reporting) Regulations 2018. The Regulations require companies to explain whether a reduction or increase in a pay ratio is attributable to a change in the company's employment model, including any increase in the proportion of the company's workers employed to work wholly or mainly outside the UK, and any increase in the proportion of the company's workforce that is not employed by the company under contracts of service [225]. In practice, pay ratio reporting narratives often refer to the impact of mergers and acquisitions and other similar changes on employee quartile pay and ratio data. In its 2021 annual report, Rentokil Initial, for example, listed three reasons why 2021 pay ratios were significantly higher than 2020, including that its 2018 acquisition of Cannon Hygiene had increased the number of hygiene technicians which had reduced the pay of its benchmark employees [237]. Likewise, Flutter Entertainment, created out of a merger between Dublin-based Paddy Power and Betfair, which reported a 60% (£14,700) jump in lower quartile employee pay in 2020, noted that that the merger had reduced the proportion of retail staff within its workforce whose 'pay structures' were 'considerably different' from head office employees

¹⁵⁴ Other companies, such as John Wood Group, have noted (but not illustrated) that impact of a change in methodology (from option C to option B) on report pay ratio data [235].

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[238]. However, the effects of redundancies are often either not acknowledged¹⁵⁵ or not linked to shifts in employee quartile pay or pay ratio.^{156 157}

Notwithstanding the challenges involved in tracing the underlying drivers of changes in quartile employee pay, data from other sections of annual reports and the financial press are consistent with the idea that large movements in quartile employee pay data are potentially just as likely to reflect changes in employee composition as they are changes in pay or pay differentials. **Tables 4.3** and **4.4** present data for the highest percentage changes in lower and median quartile employee pay in 2019-2020, 2020-2021 and 2021-2022 by reporting year, alongside summarised information on corporate restructuring and redundancies.

In some cases, these changes occur because of the disposal of UK operations, which radically alter the profile of a company's UK workforce. Packaging and paper group, Mondi, for instance, reported a 145% (£37,916) increase in lower quartile pay in 2020. This coincided with the closure of its manufacturing operations in Flintshire and Lancashire, resulting in an estimated 200 redundancies, which halved its UK workforce [240]. Likewise, plumbing and heating products distributor, Ferguson PLC, reported a 175% (£35,200) increase in its lower quartile pay in 2021, which followed the sale of its UK business in the same year. The company now has less than 250 employees, who predominantly work in management roles in its group services offices [241]. In other cases, simple, ongoing redundancies appear to influence quartile pay significantly. Engineering and consulting company, John Wood Group, for instance, reported a 43% (£14,231) increase in median pay in 2020, which occurred alongside significant redundancies in response to reduced contracting and project deferrals caused by the pandemic [235].¹⁵⁸

Not all major movements in threshold pay are the result of workers being removed from company payrolls or other changes in the composition of the UK workforce. Safety equipment manufacturer, Halma PLC, for example, reported a 24% (£4,778) jump in lower quartile pay in 2022, following a decision to repay all employees below the Executive Board temporary salary reductions implemented in April 2020 in the early months of the pandemic [242]. Nonetheless, major movements in reported threshold pay appear just as likely, perhaps more likely, to reflect major movements in employees, rather than their pay.

¹⁵⁵ There are some exceptions to this. In its 2021 annual report, for example, International Consolidated Airlines, noted that the increase in UK employee threshold pay reflected, 'changes to the size and composition of the UK workforce between years, with pay for 37,081 employees being reported for 2020 and 29,744 for 2021' [239].

¹⁵⁶ The pay ratio narrative of Mondi's 2020 annual report, for instance, noted that, its UK annual average employee number in 2020 was 173, down from 261 in 2019, due to the closure of its plants in Deeside and Nelson. However, the observation was made primarily to emphasise the international composition of its workforce, rather than for its effect on either threshold pay or pay ratios (see **Table 5.3** and below in the main text) [240].

¹⁵⁷ One reason for this may be that the 2018 Regulations limit explanations on the composition of the UK workforce to changes in pay ratios rather than thresholds and, in practice, changes in CEO variable pay, which are commonly noted in pay ratio narrative, have a far greater impact on pay ratios.

¹⁵⁸ The pay ratio narrative in the John Wood Group's annual report noted that 'key reasons for the year-on-year changes to the pay ratio' were due to 'continued evolution of our workforce through integration, divestment, and acquisitive growth', a change in the methodology applied (from option C to B), zeroing of the CEO's bonus in 2020, and a voluntary salary reduction of 10% in the CEO's base salary [235].

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Table 5.3: Highest Annual Change in Lower Quartile Employee Pay and Restructuring and Redundancies: 2019-2022 (reporting years)

% Change in LQ Employee Pay 2019-2020				% Change In MQ Employee Pay 2020-2021				% Change in UQ Employee Pay 2021-2022			
Company	%	£	Restructuring / Redundancies	Company	%	£	Restructuring / Redundancies	Company	%	£	Restructuring / Redundancies
Mondi	145%	37,916	Restructuring. Closure of plants. Redundancies. Reduction in UK employees.	Ferguson	175%	35,200	Restructuring. Sale of UK business. Reduction in UK employees.	Halma	24%	4,778	Employees repaid 20/21 salary reduction.
IWG	55%	10,600	Reduction in UK employees. ¹⁵⁹	Croda International	74%	23,571	Restructuring (location and impact on UK employees unclear). ¹⁶⁰	FirstGroup	20%	5,513	No major UK relevant restructuring. Reduction in First Bus employees.
lbstock	50%	8,574	Restructuring. Closure of manufacturing facilities. Redundancies.	Homeserve	59%	8,546	Restructuring. Redundancies. Reduction in UK employees.	Premier Foods	18%	4,485	No major UK relevant restructuring.
Vodafone	35%	8,200	Redundancies (location unclear).	SSP	42%	6,322	Restructuring. Closure of outlets. Reduction in UK employees.	Ashtead	17%	3,676	No major UK relevant restructuring.
Imperial Brands	28%	11,194	Restructuring. Redundancies (location unclear).	Associated British Foods	40%	5,600	Reduction in UK employees.	C&C	14%	3,294	No major UK relevant restructuring. ¹⁶¹

Source: FTSE 350 company annual reports and accounts, 2019-2022 and the *Financial Times*

¹⁵⁹ 2020 Annual Report also notes a 34% reduction in the value of benefits and a 42% increase in annual bonus for employees [243].

¹⁶⁰ 2021 Annual Report also notes that an employee share plan 'will pay out for 2021' and that the company awarded over double the amount of restricted share plan awards compared to previous years. It is not clear whether the quartile pay data for the reporting year 2021 include the pay out under the employee share plan [244].

¹⁶¹ C&C's 2022 Annual Report notes salary increases for drivers and drivers' mates, moving employees to a base hourly rate above the real Living Wage, and a 3% wage increase [245].

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Table 5.4: Highest Annual Change in Median Quartile Employee Pay and Restructuring and Redundancies: 2019-2022 (reporting years)

% Change in MQ Employee Pay 2019-2020				% Change In MQ Employee Pay 2020-2021				% Change in MQ Employee Pay 2021-2022			
Company	%	£	Restructuring / Redundancies	Company	%	£	Restructuring / Redundancies	Company	%	£	Restructuring / Redundancies
Mondi	166%	55,339	Restructuring. Closure of plants. Redundancies. Reduction in UK employees.	Ferguson	393%	93,900	Restructuring. Sale of UK business. Reduction in UK employees.	Vodafone	40%	16,500	Reduction in employees (UK and overseas).
Centrica	64%	26,036	Restructuring. Redundancies. Reduction in UK employees.	SSP	66%	10,259	Restructuring. Closure of outlets. Reduction in UK employees.	Halma	27%	6,980	Employees repaid 20/21 salary reduction.
Ibstock	60%	12,693	Restructuring. Reduction in UK employees.	IHG	47%	15,654	Reduction in UK employees.	Ashtead	26%	6,351	No major UK relevant restructuring.
Flutter Entertain.	60%	14,231	Restructuring. Merger. Dilution of retail staff.	4imprint	35%	5,519	Small number of UK employees.	DS Smith	21%	7,261	Restructuring (primarily non-UK). Redundancies (UK and overseas).
John Wood Group	43%	20,000	Redundancies. Reduction in UK employees.	BHP Group	34%	20,833 ¹⁶²	No major UK relevant restructuring. ¹⁶³	Severn Trent	19%	6,900	No major UK relevant restructuring.

Source: FTSE 350 company annual reports and accounts, 2019-2022 and the *Financial Times*

¹⁶² Reported in USD, converted using the Bank of England spot rate.

¹⁶³ Figure represents employees worldwide. UK employee numbers below statutory threshold for pay ratio reporting [246].

Pay ratio data can also obscure unscrupulous employment practices aimed at driving down employment conditions. The pandemic witnessed several high-profile cases of companies seeking to ‘fire and rehire’ employees – essentially dismissing and then rehiring them on new, less-favourable terms [247]. Polling published by the Trades Union Congress in January 2021 estimated that 9% of workers had been told to re-apply for their jobs on worse terms since March 2020 [248]. Cases reported prominently in the press involved InterContinental Hotels Group (IHG) [249], British Airways [250], (Table 5.4), and Centrica [251] – all of which received generous government support. We examine InterContinental Hotels Group and British Airways in greater detail below.

5.221 InterContinental Hotels Group

The hotel industry was hit hard by the pandemic [252-255]. During 2020, global occupancy fell to 20%, revenue per available room fell 75%, and one in six of IHG’s hotels were closed [174, 256]. These effects were reflected in sharp falls in IHG’s turnover, market capitalisation, and earnings (Table 5.5) and in the level of state support secured by the company.

Table 5.5: InterContinental Hotels Group – Turnover, Market Capitalisation, Dividend, and EBITDA Data: reporting years 2015-2021¹⁶⁴

	2015	2016	2017	2018	2019	2020	2021
Turnover (£m)	£1,221	£1,390	£1,319	£3,399	£3,487	£1,752	£2,148
YE (31.12) Market Cap. (£m)	£6,276	£7,186	£8,966	£8,083	£9,480	£8,567	£8,760
Annual Average Market Cap. (£m)	£6,129	£6,096	£7,866	£8,676	£8,917	£7,552	£8,931
Dividend (£m)	£127	£1,372	£439	£157	£543	£0	£0
EBITDA (£m)	£1,098	£627	£539	£506	£637	£81	£432

Source: Fame (Moody’s Analytics)

Over the course of the pandemic the company took advantage of a large, below market-rate loan under the CCF, received £14.6m under the CJRS, and benefited from over £4m in Business Rates Relief (Table 5.6).

Table 5.6: InterContinental Hotels Group – COVID-Supports: reporting years 2019-2021

Support Scheme	Value Received
CCFF	£600,000,000 (repaid on maturity)
CJRS 2020 / 2021	£11,427,000 / £3,147,000
International Employee Support (Various) 2020 / 2021	£14,949,000 / £13,919,000
Business Rates Relief 2020 / 2021	£4,092,000 / £0
Eat Out to Help Out	Received but figure not reported

Source: InterContinental Hotels Group and operating subsidiaries’ annual reports and accounts, 2015-2021

Executive pay in 2020 reflected these challenging conditions. Total CEO and CFO pay declined significantly between 2019 and 2020 [174] from £3,376,000 to £1,484,000 (-56.0%) and £2,540,000 to £1,067,000 respectively (-58.0%) (Table 5.7, Figure 5.1). Although board executives voluntarily took a 30% reduction in base salary [174], most of the decline was due to significant falls in annual bonuses and pay awarded under LTIPs. Annual bonuses fell from £983,000 and £723,000 to zero as none of the key performance targets were

¹⁶⁴ Financial data originally reported in USD and converted to GBP using the Bank of England spot rate.

met [174].¹⁶⁵ LTIP awards fell from £1,322,000 to £549,000 (-58.5%) and £1,033,000 to £391,000 (-62.1%) (Table 5.7, Figure 5.1).¹⁶⁶

In 2021, executive pay bounced back significantly. Total CEO pay climbed to £3,176,000, whilst total CFO pay increased to £2,325,000 – just 5.9% and 8.5% below 2019 levels (Table 5.7, Figure 5.1). This primarily reflected a jump in annual bonuses, which were 75.7% higher than 2019 for both CEO and CFO (Table 5.7, Figure 5.1) [175]. Performance terms under bonus plans were based on a 70% weighting for operating profit from ‘reportable segments’ and a 30% weighting for new room openings and signings [174]. The company’s 2021 report indicated that achievement against these terms was 187.3% of target [174], despite underwhelming firm performance (Table 5.5), and reflected a decision to structure executives’ annual performance reward plans to take account of the increased difficulties in achieving performance based-outcomes within a depressed market [174].¹⁶⁷ Further, although payments of £337,000 and £248,000 under the 2019/21 LTIP were lower in 2021 than 2020 (by -38.6 and -36.6% respectively), these were made despite achievement under the plan having been below the payout threshold across all measures [175]. The report noted that thresholds had been made in February 2019 and that ‘the severe travel industry impacts of the pandemic in the final two years of the cycle’ had either rendered targets ‘unachievable’, as in the case of cash flow and total gross revenue, or, as in the case of total shareholder return, had unfairly pitted executives against ‘the strong performance of peer group companies with an operating footprint with a significantly higher weighting to the faster-recovering US economy market segment and unachievable’ [175]. In light of this, the remuneration committee concluded that ‘the formulaic outcome [did] not reflect the performance of the business in the crisis’ and exercised its discretion to determine an overall vesting level of 20%, based on cash flow performance [175].

¹⁶⁵ These related to operating profit from ‘reportable segments’ (70%) – which excluded certain elements otherwise included in operating profit - and ‘an increase in absolute number of rooms’ (30%) [257].

¹⁶⁶ To reflect the reduction in the share price since the grant data for 2019 LTIP awards and ‘in light of concerns from shareholders regarding the potential for windfalls’, LTIP awards were limited to 205% of salary in line with the previous remuneration policy, rather than the new policy, which set LTIP awards to 350% for the CEO and 275% for other executive directors [174]. The final vesting outcome was 30.6% of the maximum compared with an estimated vesting level of 76% of maximum prior to the impact of the pandemic [174].

¹⁶⁷ IHG’s 2020 report noted that the targets and payment schedule for operating profit from reportable segments and the strategic measures (new room openings had new room signings) been ‘set in an environment of continued uncertainty as a result of the Covid-19 pandemic’ [174]. The targets for new room openings and new room signings were reported to be commercially sensitive and were only to be disclosed retrospectively.

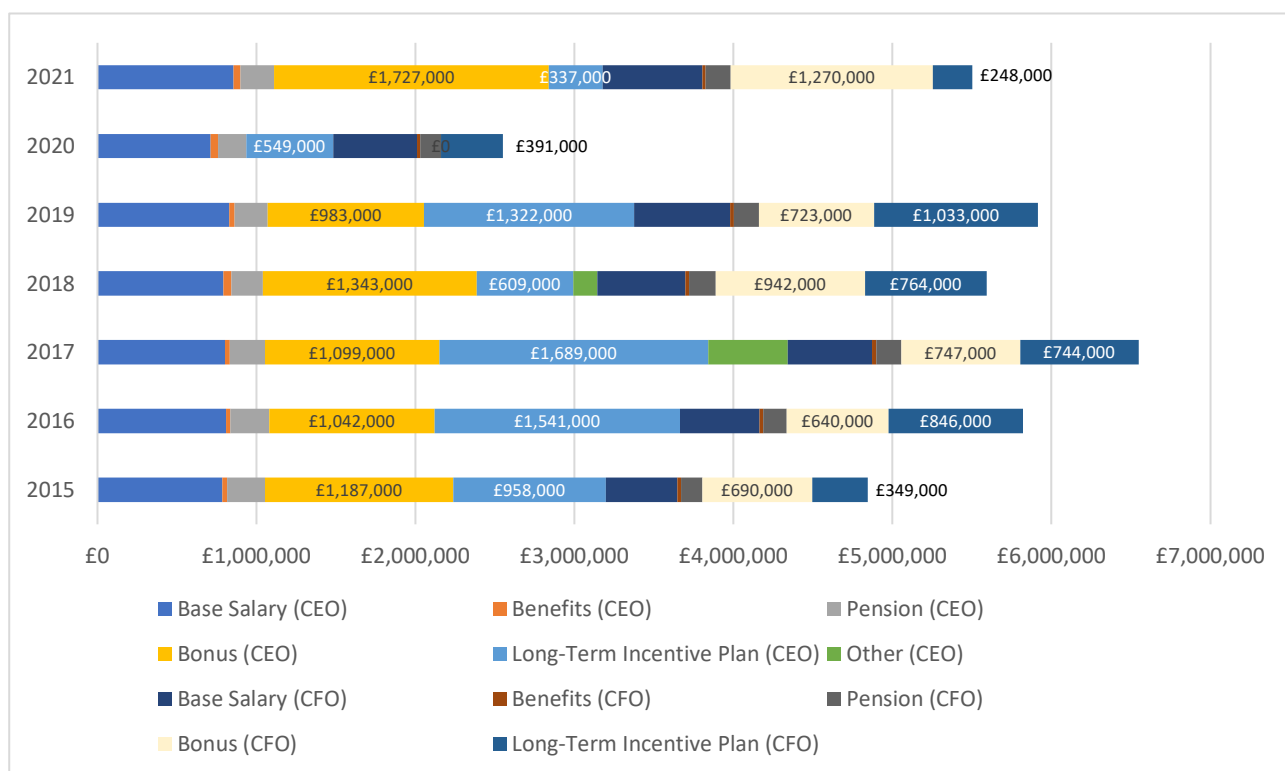
Table 5.7: InterContinental Hotels Group – CEO and CFO Remuneration (decomposed): reporting years 2015-2021

	Total Pay (CEO)	Base Salary (CEO)	Benefits (CEO)	Pension (CEO)	Bonus (CEO)	LTIP (CEO)	Other (CEO)
2015	£3,197,000	£785,000	£31,000	£236,000	£1,187,000	£958,000	£0
2016	£3,662,000	£810,000	£26,000	£243,000	£1,042,000	£1,541,000	£0
2017	£4,340,000	£801,000	£30,000	£221,000	£1,099,000	£1,689,000	£500,000
2018	£3,143,000	£792,000	£51,000	£198,000	£1,343,000	£609,000	£150,000
2019	£3,376,000	£828,000	£36,000	£207,000	£983,000	£1,322,000	£0
2020	£1,484,000	£712,000	£45,000	£178,000	£0	£549,000	£0
2021	£3,176,000	£857,000	£41,000	£214,000	£1,727,000	£337,000	£0

	Total Pay (CFO)	Base Salary (CFO)	Benefits (CFO)	Pension (CFO)	Bonus (CFO)	LTIP (CFO)	Other (CFO)
2015	£1,647,000	£450,000	£23,000	£135,000	£690,000	£349,000	£0
2016	£2,160,000	£500,000	£24,000	£150,000	£640,000	£846,000	£0
2017	£2,207,000	£530,000	£27,000	£159,000	£747,000	£744,000	£0
2018	£2,450,000	£554,000	£24,000	£166,000	£942,000	£764,000	£0
2019	£2,540,000	£602,000	£24,000	£158,000	£723,000	£1,033,000	£0
2020	£1,067,000	£524,000	£21,000	£131,000	£0	£391,000	£0
2021	£2,325,000	£630,000	£19,000	£158,000	£1,270,000	£248,000	£0

Source: InterContinental Hotels Group annual reports and accounts, 2015-2021

Figure 5.1: InterContinental Hotels Group – CEO and CFO Remuneration (decomposed): reporting years 2015-2021



Source: InterContinental Hotels Group annual reports and accounts, 2015-2021

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On first inspection, CEO-employee pay ratios and quartile employee pay over the period indicate that the largesse appears to be reflected in treatment of employees. Reported employee pay rose and pay ratios declined across all quartiles - significantly in respect of the median and upper quartiles (**Table 5.8**). However, reports in the national and regional press and in Parliament painted a contrasting picture. Although IHG's 'asset-light' business model means that it employs few workers at IHG branded hotels in the UK directly (Chapter 3), the company owns and has direct management control over several luxury establishments across the U.K., including The George in Edinburgh, and Grand Central and Kimpton Blythswood Square in Glasgow (see Chapter 3). Workers were told that their jobs were safe at the start of the pandemic and that they would be placed on furlough leave under the CJRS [258]. However, in June 2020 the company started a redundancy consultation process [259, 260]. Despite proposals from unions that the company consider alternative

Table 5.8: InterContinental Hotels Group - Pay Ratio Data: reporting years 2019-2021

CEO-Employee Pay Ratio		Quartile Pay		Annual Change in Quartile Pay		Annual Percentage Change in Quartile Pay (%)	
LQ 2019	177	LQ 2019	£18,786				
LQ 2020	85	LQ 2020	£16,736	LQ 2019-2020	£-2,050	LQ 2019-2020	-11%
LQ 2021	163	LQ 2021	£19,540	LQ 2020-2021	£2,804	LQ 2020-2021	17%
MQ 2019	119	MQ 2019	£27,766				
MQ 2020	43	MQ 2020	£33,366	MQ 2019-2020	£5,600	MQ 2019-2020	20%
MQ 2021	65	MQ 2021	£49,020	MQ 2020-2021	£15,654	MQ 2020-2021	47%
UQ 2019	58	UQ 2019	£57,383				
UQ 2020	24	UQ 2020	£58,761	UQ 2020-2021	£19,071	UQ 2019-2020	2%
UQ 2021	41	UQ 2021	£77,832	UQ 2021-2022	£1,378	UQ 2020-2021	32%

Source: InterContinental Hotels Group annual reports and accounts, 2015-2021

contracts, extended leave, or career breaks [261], an estimated 500 to 600 staff lost their jobs [249, 258, 262].¹⁶⁸ Terminated employees received statutory minimum severance packages [263] and, according to Stewart McDonald, Member of Parliament for Glasgow South, grant income under the CJRS was used to cover statutory and contractual notice pay [264, 265]. Although had originally been told that IHG's hotels would not reopen until at least at least March 2021 [249], little more than a month on from the commencement of the redundancy process, the company announced a phased reopening of its flagship hotels from November [249]. Some workers were offered their old jobs back on short-hour contracts [262]. According to Unite, which described the process as a 'mass fire and re-hire of staff to cut costs and bring in cheap labour' [249], no union members received an offer and other roles were subsequently advertised at reduced rates of pay [258].

5.222 British Airways (International Consolidated Airlines Group)

British Airways' (BA) treatment of staff raises a similar set of issues – albeit on a larger scale. As with the hotel industry, the pandemic hit the aviation sector hard [266-271]. According to the International Air Transport Association, passenger air transport measured by revenue passenger kilometre was 90% lower year-on-year in April 2020 and 75% in August [272]. BA and its parent, International Consolidated Airlines Group (IAG), experienced similar fortunes (**Table 5.9**). In 2020, IAG posted its biggest ever loss [273], was still loss-making

¹⁶⁸ During the process, documents relevant to the redundancy process were not translated into the first languages of the hotels' large migrant workforce [261] and

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in 2021 (**Table 5.9**), and was forced to draw heavily on government support, including £448m under the CJRS, a large loan under the CCFF (**Table 5.10**), and loan guarantees [239, 274-277].

Table 5.9: International Consolidated Airlines Group – Turnover, Market Capitalisation, Dividend, and EBITDA Data: reporting years 2015-2021

	IAG				British Airways		
	Turnover (£m)	YE (31.12) Market Cap. (£m)	Annual Average Market Cap. (£m)	Dividends (£m)	EBITDA (£m)	Turnover (£m)	EBITDA (£m)
2015	£16,051	£12,436	£11,365	£143	£2,543	11,333	1,240
2016	£19,306	£9,349	£9,722	£381	£3,226	11,443	2,146
2017	£20,421	£13,333	£12,114	£460	£3,477	12,226	2,431
2018	£21,910	£12,257	£13,097	£522	£4,428	13,021	3,132
2019	£21,584	£10,993	£10,233	£1,109	£3,989	13,290	2,444
2020	£6,986	£7,936	£6,199	.	£-4,002	4,001	-3,204
2021	£7,106	£7,083	£8,653	.	£-713	3,693	-791

Source: Fame (Moody's Analytics)

Table 5.10: International Consolidated Airlines Group – COVID-Supports

Support Scheme	Value Received
CCFF	£300,000,000 ¹⁶⁹
CJRS 2020 / (2021)	£258,000,000 / £190,000,000
International Employee Support (Various) 2020 / 2021	£271,156,000 / £328,767,000

Source: IAG and British Airways Annual Reports and Accounts 2019-2021

IAG's difficulties were reflected in a major drop in CEO pay in 2020 and 2021.^{170 171} In addition to a reduction in base salary [275], CEO, Luis Gallego, received no annual bonus or award under his LTIP for either 2020 or 2021. In 2021, Gallego received over £2 million less than he and his predecessor, Willie Walsh, had received in 2019 (**Table 5.11, Figure 5.2**).

¹⁶⁹ Amount relates to commercial paper issued. The loan was repaid.

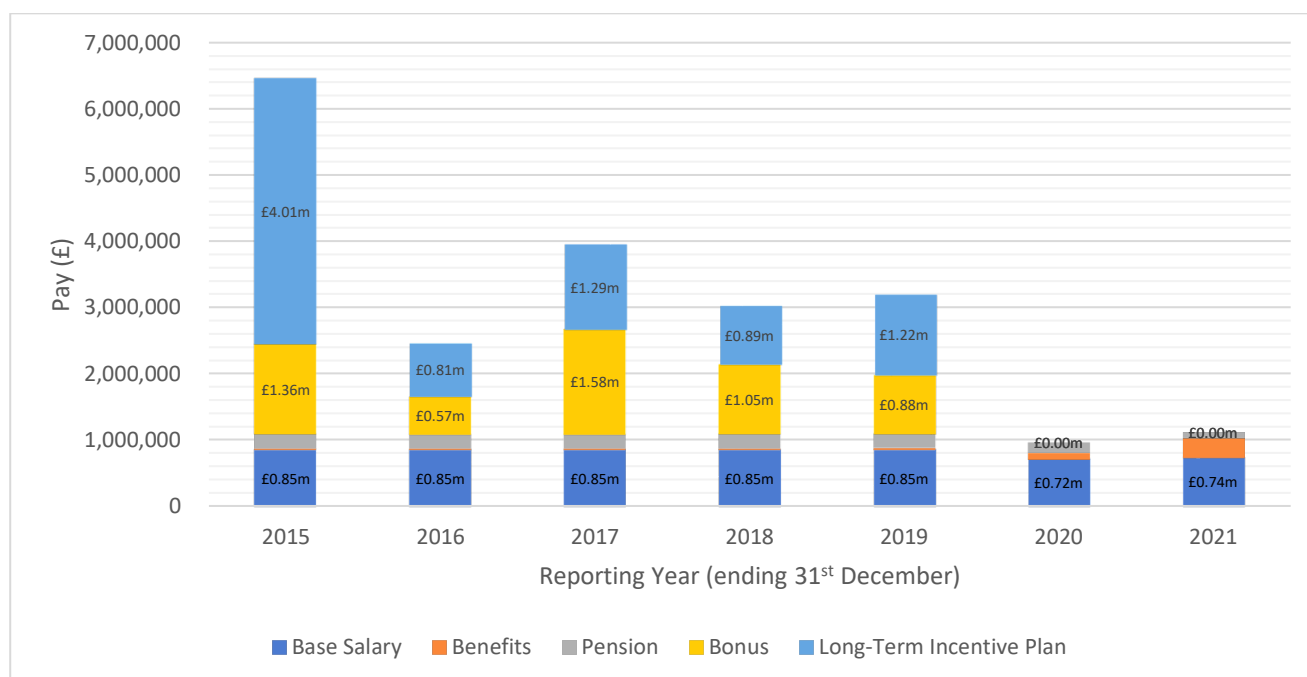
¹⁷⁰ We have not included CFO data as IAG did not report pay for its CFO in 2021 [239].

¹⁷¹ IAG's 2021 annual report also notes that the CEO's 2020 annual incentive plan was cancelled by the Committee and that the CEO requested not to be considered for an award under the 2021 annual incentive plan [239].

Table 5.11: International Consolidated Airlines Group – CEO Remuneration (decomposed): reporting years 2015-2021¹⁷²

Pay	Single Figure (CEO)	Base Salary (CEO)	Benefits (CEO)	Pension (CEO)	Bonus (CEO)	Long-Term Incentive Plan (CEO)
2015	£6,455,000	£850,000	£27,000	£213,000	£1,360,000	£4,005,000
2016	£2,462,000	£850,000	£24,000	£213,000	£567,000	£808,000
2017	£3,954,000	£850,000	£25,000	£213,000	£1,580,000	£1,286,000
2018	£3,030,000	£850,000	£27,000	£213,000	£1,051,000	£889,000
2019	£3,198,000	£850,000	£30,000	£213,000	£883,000	£1,222,000
2020	£963,000	£717,000	£92,000	£154,000	£0	£0
2021	£1,110,000	£738,000	£280,000	£92,000	£0	£0

Source: IAG and British Airways Annual Reports and Accounts 2015-2022

Figure 5.2: International Consolidated Airlines Group – CEO Remuneration (decomposed): reporting years 2015-2021

Source: IAG and British Airways Annual Reports and Accounts 2015-2022

Pay ratio data appear to indicate that IAG took a wholly different approach to its UK employees. CEO-employee pay ratios dropped across all quartiles across the period, significantly in respect of the lower and median quartiles (**Table 5.12**). Lower, median, and upper pay quartiles for UK employees were also 31%, 21%, and 25% higher - respectively, the 10th, 17th, and 18th highest increases over the period in our sample.

¹⁷² Figures reported in £(000) in annual reports and accounts.

Table 5.12: International Airlines Group (British Airways) - CEO Pay Ratio and Percentile Employee Pay: reporting years 2019-2021

CEO-Employee Pay Ratio		Quartile Pay (£)		Annual Change in Quartile Pay (£)		Annual Percentage Change in Quartile Pay (£)		Percentage Change in Quartile Pay 2019-2021 (£)	
LQ 2019	109	LQ 2019	£29,360						
LQ 2020	34	LQ 2020	£28,383	LQ 2019-20	-£977	LQ 2019-20	-3%		
LQ 2021	29	LQ 2021	£38,600	LQ 2020-21	£10,217	LQ 2020-21	36%	LQ 2019-21	31%
MQ 2019	72	MQ 2019	£44,208						
MQ 2020	22	MQ 2020	£42,823	MQ 2019-20	-£1,385	MQ 2019-20	-3%		
MQ 2021	21	MQ 2021	£53,400	MQ 2020-21	£10,577	MQ 2020-21	25%	MQ 2019-21	21%
UQ 2019	49	UQ 2019	£64,673						
UQ 2020	15	UQ 2020	£63,877	UQ 2020-21	-£796	UQ 2019-20	-1%		
UQ 2021	14	UQ 2021	£80,700	UQ 2021-22	£16,823	UQ 2020-21	26%	UQ 2019-21	25%

Source: IAG and British Airways Annual Reports and Accounts 2015-2022

In practice, however, pay and conditions worsened significantly. In April 2020, British Airways wrote to trade unions about plans to cut just under a third of its workforce (approx. 12,000 jobs) and reduce terms and conditions for most of its remaining employees [250, 278]. Among other things, the company outlined its intention to only meet its minimum statutory obligations, revise its employment procedures,¹⁷³ restructure pay, terms and conditions for cabin crew, including ‘temporary layoff or short-time arrangements’, and alter rostering and scheduling for its pilots [279]. Unions were warned that if the company was unable to reach agreement all employees would be made redundant, with a proportion then re-employed under new terms and conditions [279]. Evidence to the House of Commons Transport Committee suggested that some employees stood to lose between 55 and 77% of their income, as well as end up on poorer terms and conditions [279]. The Committee itself described the move as ‘a calculated attempt to take advantage of the pandemic to cut jobs and weaken the terms and conditions of its remaining employees’ and another instance of ‘fire and rehire’ [279].

Although, push-back from the unions tempered the impact of British Airways’ plans [250, 280-286], thousands of jobs were shed and, on aggregate, employee conditions and pay deteriorated significantly. In 2020, BA made approximately 10,000 staff redundant, 4,700 of which were cabin crew. According to Unite, remaining staff were forced to accept pay cuts and demotions, which involved salary reductions of between 15 and 35% [287]. Subsequently, in October 2011, the *Financial Times* reported that BA planned to rehire an estimated 3,000 new cabin crew, many on substantially reduced terms and conditions [287, 288]. Equally, during the peak of the pandemic check-in staff in BA’s ‘A scales’ division agreed to take a 10% pay cut, which the company only agreed to reinstate in July 2022 after the threat of industrial action and continued travel disruption [281-286]. BA pilots were also forced into accepting a deal, which included voluntary working, an initial 20% pay reduction, the creation of a standby pool of 300 pilots on reduced wages, and compulsory job cuts of 270 [280, 289].

¹⁷³ These included changes to disciplinary, grievance, absence and performance management procedures [279].

CEO-employee pay ratios fail to reflect these changes primarily because of their sensitivity to big changes in variable CEO pay. When variable pay contracts or expands significantly, as in the present case, pay ratios shift accordingly. Companies often point this out when explaining large changes in pay ratios, which can strengthen the assumption that employee working conditions are broadly benign and stable. What is easily lost is how efforts to drive down terms of conditions fail to show up in reported quartile pay because they often coincide, as in the present case, with redundancies, which disproportionately affect lower paid employees and change the composition of the pool of employees used to identify quartile pay.¹⁷⁴ IAG's only comment in its 2020 report on the issue was that, 'BA has undertaken many initiatives in recent years to ensure its lower-paid workers are paid fairly' [275].¹⁷⁵

5.23 Validity and the Exclusion of Furloughed Employees from Pay Ratio Calculations

The treatment of furloughed employees in pay ratio calculations can also significantly influence the profile of employees used to identify threshold pay. Many companies – particularly those which used options B and C to calculate threshold pay - excluded furloughed employees from their pay ratio calculations (**Table 5.13**). This was primarily due to guidance published by the Government Equalities Office in December 2020 to help employers with their gender pay gap calculations [229]. The guidance directed companies to exclude employees on furloughed leave from their list of full-pay relevant employees,¹⁷⁶ which had the effect of taking them out of pay ratio calculations where companies used gender pay gap data.¹⁷⁷ By contrast, in all but 3 cases companies using Option A included furloughed employees in their calculations (**Table 5.13**).¹⁷⁸

Table 5.13: Exclusion of Furloughed Employees by Method of Pay Ratio Calculation 2019/20-2021/22

	Option A			Option B			Option C		
	N (total cases)	N (ex. furl. emp.)	% (ex. furl. emp.)	N (total cases)	N (ex. furl. emp.)	% (ex. furl. emp.)	N (total cases)	N (ex. furl. emp.)	% (ex. furl. emp.)
2019/20	5	1	20	1	1	100	1	1	100
2020/21	54	2	3.7	28	8	28.6	6	5	16.7
2021/22	20	2	10	13	6	46.2	4	1	25.0

Source: FTSE 350 company annual reports and accounts, 2019-2022

¹⁷⁴ In practice, this effect was compounded IAG's decision to exclude furloughed workers from its pay ratio calculations in 2000 (for the effect of this see the section below) [239].

¹⁷⁵ IAG's 2021 report notes that less than 5% of the 24,000 employees present in both 2020 and 2021 received contractual salary increases in 2021 [275].

¹⁷⁶ Unless their pay was topped up to their usual full pay.

¹⁷⁷ Where companies participating in the CJRS reported prior to January 2021 and used options B and C, we assumed that they included furloughed employees in their pay ratio calculations, unless stated otherwise. Companies using options B and C reporting from January 2021 onwards were assumed to have followed the gender pay gap guidance and excluded furloughed employees from their calculations again unless stated otherwise. Finally, where companies used options B and C and stated that furloughed employees had been included in their calculations, we assumed they took the same approach in the following year, unless otherwise stated.

¹⁷⁸ The data in **Table 5.13** need to be read against the challenges involved in identifying companies that exclude furloughed employees from pay ratio calculations. Only 13 companies stated outright whether furloughed employees had been included or excluded in their calculations. This is symptomatic of a broader lack of clarity in pay ratio reporting. Although companies typically comply with statutory reporting requirements [225], in practice, key details relevant to how pay ratio data have been generated are omitted. Identifying whether companies using Option B followed gender pay gap guidance (published 14th December 2020) in excluding furloughed employees is particularly problematic where companies' year end fell on 31st December 2000.

Excluding furloughed employees from pay ratio calculations is likely to have compressed companies' lower quartile and median pay ratios for two reasons.¹⁷⁹ First, it is likely to have omitted a disproportionate number of lower paid workers from pay ratio calculations – particularly those in customer facing roles, who were more likely to have been furloughed [290, 291]. Second, where employers failed to top up furloughed employees' wages to 100% of their usual pay, workers on reduced pay effectively will have fallen out of employee pay quartile and pay ratio calculations.

One way of illustrating these effects is to compare differences between annual changes in mean (average) threshold pay for companies that included and excluded furloughed employees. **Table 5.14** presents this data for 2020 (second quarter) to 2021 (first quarter) and 2021 (first quarter) to 2022 (second quarter) for companies that furloughed employees in at least one year. **Table 5.15** presents data over the same time periods for changes in average threshold pay in the year companies furloughed employees, reflecting the fact that not all companies furloughed employees in both time periods. The data show that in both cases increases in average threshold pay were greater where furloughed employees were excluded from pay ratio calculations for all thresholds over both periods.

Table 5.14: Comparison in Changes in Quartile Employee Pay between Companies Including and Excluding Furloughed Employees (furloughed employees in at least one year): 2020/21-2021/22

	Included Furloughed Employees				Excluded Furloughed Employees			
	N	Min. (£)	Max. (£)	Mean (£)	N	Min. (£)	Max. (£)	Mean (£)
Change in LQ Pay 2019/2020-2020/21	59	-£11,579	£8,574	£3	8	-£977	£7,000	£1,763
Change in LQ Pay 2020/21-2021/22	76	-£12,646	£10,000	£1,285	13	-£5,219	£10,217	£1,724
Change in MQ 2019/2020-2020/21	59	-£11,249	£26,036	£911	8	-£1,385	£20,000	£3,826
Change in MQ Pay 2021/22	76	-£30,475	£15,654	£1,106	13	-£2,738	£10,577	£1,380
Change in UQ Pay 2019/2020-2020/21	59	-£16,678	£17,805	£822	8	-£3,585	£12,000	£3,456
Change in UQ Pay 2021/22	76	-£30,375	£23,892	£2,453	13	-£6,513	£16,823	£2,887

Source: FTSE 350 company annual reports and accounts, 2019-2022

¹⁷⁹ Fifteen companies excluded furloughed workers from their pay ratio calculations in at least one year. In some cases, this reduced the pool of employees used to calculate pay ratio data significantly. Pub and restaurant group, Mitchells and Butlers, for instance, reported including just 194 employees in their calculations out of a potential workforce of 42,373 [122].

Table 5.15: Comparison in Changes in Lower and Median Quartile Employee Pay for Companies between Companies Including and Excluding Furloughed Employees (companies furloughed employees in second year): 2020/21-2021/22

	Included Furloughed Employees				Excluded Furloughed Employees			
	N	Min. (£)	Max. (£)	Mean (£)	N	Min. (£)	Max. (£)	Mean (£)
Change in LQ Pay 2020/21	52	-£11,579	£8,574	-£164	6	-£977	£7,000	£2,392
Change in LQ Pay 2021/22	69	-£12,646	£10,000	£1,349	12	-£5,219	£10,217	£1,958
Change in MQ Pay 2020/21	52	-£11,249	£26,036	£896	6	-£1,385	£20,000	£4,365
Change in MQ Pay 2021/22	69	-£30,475	£15,654	£960	12	-£2,738	£10,577	£1,633
Change in UQ Pay 2020/21	52	-£16,678	£17,805	£381	6	-£796	£12,000	£3,577
Change in UQ Pay 2021/22	69	-£30,375	£23,892	£2,749	12	-£6,513	£16,823	£3,136

Source: FTSE 350 company annual reports and accounts, 2019-2022

5.24 Abstract versus Actual Pay

Some companies' justifications for excluding furloughed employees highlight a basic tension in reasoning about the underlying purpose of pay ratio data. Leeds based plastic piping systems manufacturer, Genuit, for example, reported that furloughed employees were excluded 'to avoid artificially depressing the employee pay quartiles versus the current ongoing rates of pay' [292]. This approach effectively privileges an accounting logic of consistency, where pay ratio data is conceived of as a way of facilitating year-on-year comparisons in *abstract* pay, rather than as a measure of actual income inequalities.

The contorting effects of this emphasis on abstract pay on pay ratio data as an accurate guide to income inequalities is neatly illustrated by the approach taken by cinema operator, Cineworld. Cineworld furloughed much of its workforce in response to the closure of its theatres in 2020 and 2021.¹⁸⁰ Prior to the pandemic, the company had used Option B to calculate its pay ratio data [294]. In 2020, it switched to Option C, specifically to smooth the impact of having so many workers on furlough. Option B was not considered to 'result in a representative sample' of its employees [293]. Consequently, the company 'add[ed] back furloughed employees into the Gender Pay Gap reporting sample on a full-time equivalent basis', and then multiplied the hourly rate of pay of the representative employees to arrive at an FTE rate [176]. On the one hand, including furloughed employees is likely to have increased the relative proportion of lower paid workers in the companies' pay ratio calculations. On the other hand, however, and despite declining employee pay across thresholds (**Table 5.16**), multiplying the hourly pay of representative employees to produce an FTE rate will have failed to accommodate the reduced pay of furloughed workers.

¹⁸⁰ Cineworld received £44.5m and £27.6m under CJRS in 2020 and 2021 respectively [176, 293].

Table 5.16: Cineworld - CEO Pay Ratio and Percentile Employee Pay: 31st December 2019-31st December 2021

CEO-Employee Pay Ratio		Quartile Pay (£)		Annual Change in Quartile Pay (£)		Annual Percentage Change in Quartile Pay (%)			Percentage Change in Quartile Pay 2019-2021 (%)	
LQ 2019	119	LQ 2019	£17,777							
LQ 2020	47	LQ 2020	£16,832	LQ 2019-2020	-945	LQ 2019-2020	-5.3			
LQ 2021	89	LQ 2021	£16,630	LQ 2020-2021	-202	LQ 2020-2021	-1.2	LQ 2019-2021	-6.5	
MQ 2019	114	MQ 2019	£18,467							
MQ 2020	45	MQ 2020	£17,714	MQ 2019-2020	-753	MQ 2019-2020	-4.1			
MQ 2021	84	MQ 2021	£17,481	MQ 2020-2021	-233	MQ 2020-2021	-1.3	MQ 2019-2021	-5.3	
UQ 2019	100	UQ 2019	£21,074							
UQ 2020	41	UQ 2020	£19,327	UQ 2019-2020	-1,747	UQ 2019-2020	-8.3			
UQ 2021	76	UQ 2021	£19,649	UQ 2020-2021	322	UQ 2020-2021	1.7	UQ 2019-2021	-6.8	

Source: Cineworld annual reports and accounts, 2019-2021

At one level, this emphasis on abstract pay is consistent with the underlying rationale of regulations governing pay ratio reporting, which requires employee pay and benefits to be calculated on an FTE basis [225]. Government guidance suggests that this approach gives a 'clear picture of the relationship between executive and wider employee pay, regardless of hours worked by individual employees' [226], but the logic breaks down where companies have furloughed a large number of people on hourly paid contracts.¹⁸¹

A case in point concerns pay data published by pub and restaurant company Mitchells and Butlers [122, 171] (**Table 5.17**), where hourly paid workers represent 85% of the workforce and which uses option C to calculate pay ratio data [122]. In the reporting year 2019-2020, over 99% of its employees (all but 150) were on furlough for much of the period [122]. The company's annual report states cryptically that 'employee pay data is based just on worked hours converted to a full time equivalent and therefore were not impacted by furlough pay'[171]. In other words, the net effect of calculating threshold pay on an FTE equivalent bases was to discount the fact that most employees were receiving a proportion (typically 80%) of their usual pay.^{182 183}

¹⁸¹ By way of background, the underlying unit of analysis in gender pay gap reporting is hourly pay [228].

¹⁸² The amount companies could claim for an employee under the CJRS was dependent on their 'usual' wage, i.e. their average wage for a specified period prior to furloughed leave [295]. In the present case, Mitchells and Butlers topped up pay of all those paid above the furlough scheme cap to 80% of normal pay [171].

¹⁸³ The data in Mitchells and Butlers' 2020 annual report was published prior to the publication of the gender pay gap guidance (see above in the main text). In its 2021 annual report, which following the publication of the guidance, the company noted that calculations had been 'severely distorted' by the impact of CJRS. Only 194 out of 42,373 employees on the 'snapshot date' for calculating the gender pay gap were included in the calculation, which was 'not representative of the actual pay gap of all workers' [122]. In contrast to many companies, Mitchells and Butlers provide a relatively detailed account of the effects of following gender pay gap guidance and furloughed leave in generating pay ratio data [122].

Table 5.17: Mitchells and Butlers - CEO Pay Ratio and Percentile Employee Pay: 29th September 2019-26th September 2021¹⁸⁴

CEO-Employee Pay Ratio		Quartile Pay (£)		Annual Change in Quartile Pay (£)		Annual Percentage Change in Quartile Pay (%)		Percentage Change in Quartile Pay 2019-2021 (%)	
LQ 2019	120	LQ 2019	£14,014						
LQ 2020	37	LQ 2020	£14,924	LQ 2019-2020	£910	LQ 2019-2020	6.5		
LQ 2021	41	LQ 2021	£15,215	LQ 2020-2021	£291	LQ 2020-2021	2.0	LQ 2019-2021	8.6
MQ 2019	112	MQ 2019	£15,046						
MQ 2020	35	MQ 2020	£15,583	MQ 2019-2020	£537	MQ 2019-2020	3.6		
MQ 2021	38	MQ 2021	£15,269	MQ 2020-2021	-£314	MQ 2020-2021	-2.0	MQ 2019-2021	1.5
UQ 2019	106	UQ 2019	£15,881						
UQ 2020	35	UQ 2020	£15,806	UQ 2019-2020	-£75	UQ 2019-2020	-0.5		
UQ 2021	36	UQ 2021	£17,126	UQ 2020-2021	£1,320	UQ 2020-2021	8.4	UQ 2019-2021	7.8

Source: Company annual reports and accounts, 2019-2022.

5.3 Comparison of Quartile Pay

5.31 FTSE 350 Companies

Table 5.18 presents mean and median values for lower, median, and upper threshold employee pay for 2019/2020 to 2021/22.¹⁸⁵ The data show that mean lower, median, and upper quartile pay dropped in 2020/21, when pandemic-related economic disruption was at its peak. This contrasted with median lower, median and upper quartile pay, which – adjusted for inflation – remained relatively steady. By 2021/22 mean and median pay across the three quartiles had increased beyond pre-pandemic levels.¹⁸⁶

Table 5.18: Means and Medians of Lower, Median and Upper Quartile Employee Pay: 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£32,038	£31,883	£34,158	£44,940	£44,816	£48,275	£69,316	£68,021	£74,068
Med.	£29,355	£29,386	£31,298	£40,945	£40,891	£43,340	£61,191	£60,716	£66,082
Std. Dev.	13240	12938	14206	21767	20997	23517	41634	37253	42918
Skew	1.548	1.451	1.278	1.51	1.435	1.338	1.706	1.682	1.606
Kurt	3.081	2.803	2.037	2.662	2.654	2.028	3.201	3.871	3.012
N	166	202	200	166	202	200	166	202	200

Source: Company annual reports and accounts, 2019-2022.

¹⁸⁴ The data in the table have been back calculated from pay ratios reported in the company's annual reports.

¹⁸⁵ All tables in this section exclude companies where the data are deemed unreliable (primarily because of the method of calculation used to account for employees on furlough leave).

¹⁸⁶ Although results for Skewness and Kurtosis indicate that the data are normally distributed, high standard deviations indicate considerable variation within each quartile across the period.

These broad trends conceal difference between sectors (see **Table A5.1**) [236].¹⁸⁷ Between 2019/20 and 2021/22, for example, average lower quartile employee pay decreased in the construction (median only), administrative and support service activities, human health and social work activities, and arts, entertainment and recreation (**Table A5.1**). For average median quartile pay over the same period, there were falls in the mining and quarrying sector, accommodation and food (median only), real estate activities, administrative and support service activities, human health and social work activities, and arts, entertainment and recreation (**Table A5.1**). For average upper quartile pay between 2019/20 and 2021/22, mining and quarrying, accommodation and food (median only), real estate activities, human health and social work activities, and arts, entertainment and recreation all saw declines (**Table A5.1**).

5.32 Quartile Pay and Participating in CJRS

Tables 5.19-5.20 present quartile employee pay data for companies participating and non-participating in CJRS (excluding cases where treatment of employees on furlough leave may distort the results). The data indicate that: a) between 2019/20 and 2020/21 and 2019/20 and 2021/22 mean and median lower, median and upper quartile pay increased for companies that did not participate in CJRS (save for mean upper quartile employee pay between 2019/20 and 2020/21 which declined); b) between 2019/20 and 2020/21 mean and median lower, median and upper quartile employee pay declined for companies participating in CJRS; c) in proportionate terms, mean and median increases in lower and median quartile pay between 2019/20 and 2021/22 for companies that participated in CJRS were lower than they were for companies that did not participate in CJRS; d) in proportionate terms, mean increases in lower and median quartile pay between 2019/20 and 2021/22 for companies that did not participate in CJRS were almost 4 and 3 times greater than companies that did participate in CJRS; e) between 2019/20 and 2021/22 median upper quartile pay declined for companies participating in CJRS.

¹⁸⁷ We use the highest level (section) groupings within the UK Standard Industrial Classification of Economic Activities 2007 (UK SIC 2007) to classify firms by sector. 'Utilities' is a combination of Section D (Electricity, Gas, Steam and Air Conditioning Supply) and E (Water Supply, Sewerage, Waste Management And Remediation Activities).

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Table 5.19: Means and Medians of Lower, Median and Upper Quartile Employee Pay: Companies participating in the CJRS - 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£26,304	£25,446	£26,868	£33,815	£33,773	£35,004	£47,385	£47,242	£50,109
Med.	£26,066	£25,085	£26,745	£33,685	£33,000	£35,692	£50,000	£44,672	£45,254
Std. Dev.	7230	7245	7997	10739	11904	12484	17326	18923	21422
Skew	0.412	0.449	0.286	0.032	0.512	0.304	-0.049	0.47	0.825
Kurt	-0.169	-0.547	-0.22	-1.116	-0.086	-0.414	-1.115	0.07	1.492
N	63	83	82	63	83	82	63	83	82

Source: Company annual reports and accounts, 2019-2022.

Table 5.20: Means and Medians of Lower, Median and Upper Quartile Employee Pay (excluding Problematic Cases): Companies not-participating in the CJRS - 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£34,995	£35,414	£38,075	£50,846	£51,004	£55,637	£81,153	£79,629	£87,335
Med.	£30,974	£31,638	£34,000	£45,814	£46,034	£49,973	£67,299	£69,078	£74,975
Std. Dev.	14760	14224	15394	23865	22742	25335	45945	40296	46671
Skew	1.258	1.169	1.034	1.207	1.192	1.07	1.336	1.449	1.317
Kurt	1.695	1.567	1.039	1.3	1.507	0.896	1.533	2.548	1.638
N	108	128	126	108	128	126	108	128	126

Source: Company annual reports and accounts, 2019-2022.

Tables 5.21-5.22 present quartile employee pay data for companies retaining and repaying (either fully or partially) grants received under CJRS. The data indicate that: a) the mean and median for lower and median quartile and median pay was lower in 2021/22 than 2019/20 for companies that retained grants under CJRS; b) by contrast the mean and median for lower quartile and median pay was higher in 2021/22 than 2019/20 for companies that repaid grants under CJRS; c) the mean for upper quartile pay was higher in 2021/22 compared to 2019/20 for both companies that repaid and retained CJRS grants, but the median was lower.

Table 5.21: Means and Medians of Lower, Median and Upper Quartile Employee Pay: Companies retaining Grants under the CJRS - 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£25,229	£23,611	£24,788	£31,539	£30,689	£31,386	£43,203	£42,538	£44,962
Med.	£23,056	£20,691	£21,219	£27,766	£29,418	£27,536	£39,749	£36,531	£38,499
Std. Dev.	8116	7038	8312	10989	11742	11502	16050	16717	18222
Skew	1.099	0.877	0.358	0.594	1.042	0.158	0.272	0.277	0.434
Kurt	0.898	0.244	-0.04	-0.615	1.124	-1.084	-0.788	-1.339	-1.15
N	27	35	34	27	35	34	27	35	34

Source: Company annual reports and accounts, 2019-2022.

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Table 5.22: Means and Medians of Lower, Median and Upper Quartile Employee Pay: Companies repaying Grants under the CJRS - 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£26,970	£26,973	£28,221	£35,099	£35,973	£37,341	£49,455	£50,909	£54,081
Med.	£27,682	£27,294	£28,215	£36,000	£36,948	£36,788	£50,064	£50,100	£50,000
Std. Dev.	6356	6831	7017	10454	11113	11904	17855	19992	22795
Skew	-0.217	0.136	0.373	-0.238	-0.021	0.173	-0.119	0.496	0.928
Kurt	-0.97	-0.757	-0.36	-1.205	-0.796	-0.635	-1.284	0.276	2.127
N	35	44	44	35	44	44	35	44	44

Source: Company annual reports and accounts, 2019-2022.

5.33 Quartile Pay and Business Rates Relief

Tables 5.23-5.24 present quartile employee pay data for companies eligible and not-eligible for Business Rates Relief. The data indicate that: a) between 2019/20 and 2020/21 the mean and median lower, median and upper quartile employee pay declined for companies not eligible for Business Rates Relief, but increased marginally for companies eligible for Business Rates Relief (save with the exception of median employee pay); b) mean and median lower, median and upper quartile employee pay between 2019/20 and 2021/22 increased for both sets of companies (with the exception of median employee pay for companies eligible for Business Rates Relief).

Table 5.23: Companies eligible for BRR - Means and Medians of Lower, Median and Upper Quartile Employee Pay: 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£19,225	£19,301	£20,522	£23,448	£23,626	£25,229	£31,853	£31,873	£33,821
Med.	£18,436	£19,019	£19,775	£21,029	£21,590	£21,217	£25,999	£25,000	£28,792
Std. Dev.	3607	3797	4303	6819	6869	8771	13709	13975	16774
Skew	1.193	1.367	1.742	1.031	0.897	1.311	0.887	1.195	1.41
Kurt	1.782	2.47	3.277	0.485	-0.334	0.967	-0.39	0.284	1.145
N	22	27	25	22	27	25	22	27	25

Source: Company annual reports and accounts, 2019-2022.

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Table 5.24: Companies not eligible for BRR - Means and Medians of Lower, Median and Upper Quartile Employee Pay: 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£33,316	£33,006	£35,159	£47,097	£46,771	£50,137	£73,153	£71,371	£77,328
Med.	£30,161	£29,909	£32,228	£42,173	£42,406	£44,897	£64,500	£64,101	£67,546
Std. Dev.	13170	12905	14067	21561	20777	23289	41552	36922	42761
Skew	1.549	1.431	1.283	1.535	1.461	1.369	1.714	1.737	1.637
Kurt	3.056	2.757	2.149	2.647	2.688	2.066	3.078	3.954	2.985
N	151	185	184	151	185	184	151	185	184

Source: Company annual reports and accounts, 2019-2022.

Tables 5.25-5.26 present quartile employee pay data for companies retaining and repaying (either fully or partially) Business Rates Relief. The data indicate that: a) mean and median lower, median and upper quartile employee pay increased between 2019/20 and 2020/21 and between 2019/20 and 2021/22 for companies that repaid the relief; b) lower (mean and median) and upper (median) quartile employee pay dropped between 2019/20 and 2020/21 for companies that retained the relief; c) mean and median lower, median and upper quartile employee pay increased (unadjusted for inflation) between 2019/20 and 2021/22 for companies that retained the relief.

Table 5.25: Companies retaining BRR - Means and Medians of Lower, Median and Upper Quartile Employee Pay: 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£18,435	£18,345	£19,422	£21,609	£22,574	£24,875	£30,138	£31,270	£35,335
Med.	£19,000	£17,684	£19,658	£21,000	£21,000	£20,147	£24,533	£24,026	£27,806
Std. Dev.	2018	2393	2302	3859	6884	10648	12242	15729	20562
Skew	-1.2	0.018	0.827	0.185	1.611	1.799	1.507	1.815	1.674
Kurt	1.153	-0.637	1.131	-1.241	1.732	2.34	2.556	1.996	1.408
N	9	11	10	9	11	10	9	11	10

Source: Company annual reports and accounts, 2019-2022.

Table 5.26: Companies repaying BRR - Means and Medians of Lower, Median and Upper Quartile Employee Pay: 2019/20-2021/22

	LQ Pay 2019/20	LQ Pay 2020/21	LQ Pay 2021/22	MQ Pay 2019/20	MQ Pay 2020/21	MQ Pay 2021/22	UQ Pay 2019/20	UQ Pay 2020/21	UQ Pay 2021/22
Mean	£20,506	£21,482	£22,648	£26,225	£26,492	£27,874	£35,342	£35,762	£36,305
Med.	£18,086	£19,362	£19,859	£24,154	£24,330	£25,946	£32,332	£31,029	£34,164
Std. Dev.	4320	4410	5638	8002	7057	7998	15112	13911	15921
Skew	0.938	1.192	1.166	0.498	0.279	0.467	0.449	0.371	0.55
Kurt	-0.172	0.666	-0.015	-0.989	-1.26	-1.334	-1.325	-1.389	-0.995
N	11	11	10	11	11	10	11	11	10

Source: Company annual reports and accounts, 2019-2022.

5.4 Pay Ratios

This section examines pay ratios. First, we briefly explore trends in pay ratios. Second, we present the results of multivariate analysis examining the extent to which changes in pay ratios going into and coming out of the pandemic differed between companies that received government support and those that did not.

5.41 Trends in Pay Ratios

Table 5.27 shows trends in lower, median and upper quartile pay ratios between 2019/20 and 2021/22 for FTSE 100 and FTSE 250 companies. Broadly trends in pay ratios follow trends in CEO remuneration. In both groups of companies, pay ratios at all levels of the employee pay distribution decreased substantially in the first year of the pandemic compared with the previous year, as CEO pay fell in the same period.

Pay ratios are higher in FTSE 100 companies because of higher levels of executive remuneration (see **Tables 4.1** and **4.2**, Chapter 4). In proportionate terms, the decrease in pay ratios were larger in FTSE 100 companies than in FTSE 250 companies. The median pay ratio, for example, decreased by 42% in FTSE 100 companies, compared with 29% in FTSE 250 companies.

Again, mirroring trends in CEO pay, pay ratios in 2021/22 increased as the economic disruption associated with the pandemic began to abate. In FTSE 100 companies, mean pay ratios did not increase to the extent that they matched or exceeded pay ratios in the year immediately prior to the onset of the pandemic (2019/20). Median pay ratios, however, did return to pre-COVID levels for FTSE 100 companies. There was an extreme value in 2019 for Ocado Group PLC (a FTSE 100 company) which inflated the mean. If this company is excluded, mean pay ratios in FTSE 100 companies in 2019/20 were similar to 2021/22.

Pay ratios also increased in the year following the beginning of the pandemic in FTSE 250 companies, and in proportionate terms to a much greater extent – almost doubling between 2020/21 and 2021/22. Consequently, pay ratios were higher in 2021/22 than they were in 2019/20. Carnival PLC had a pay ratio in excess of 1,000 in 2021/22 which inflated the mean for FTSE 250 companies. Nonetheless, the pay ratio in 2021/22 remains above that in 2019/20 when this company is excluded, although the difference is reduced by around half for the lower and median quartile pay ratios (from 28 to 12 for the lower quartile pay ratio; from 20 to 9 for the median quartile).

Table 5.27: Trends in average Lower, Median and Upper Quartile Pay Ratios in FTSE 100 and FTSE 250 Companies: 2019-2022¹⁸⁸

		Employee pay level	2019/20	2020/21	2021/22
FTSE-100	Lower quartile (25%)	Mean	171	103	135
		Median	112	93	115
	Median (50%)	Mean	131	76	98
		Median	79	66	84
	Upper quartile (75%)	Mean	98	53	69
		Median	54	42	54
FTSE-250	Lower quartile (25%)	Mean	68	50	96
		Median	54	43	67
	Median (50%)	Mean	51	36	72
		Median	39	30	48

¹⁸⁸ The FTSE 100 company Ocado Group PLC (in 2019) and the FTSE 250 company Carnival PLC (in 2021) had lower and median pay ratios above 1000. Ocado Group PLC (in 2019) also had an upper quartile pay ratio above 1000.

Upper quartile (75%)	Mean	37	26	47
	Median	27	21	33

Source: Company annual reports and accounts, 2019-2022.

5.42 Comparison of Pay Ratios

As with Chapter 4, the analysis in this section focuses on three two time-period comparisons. The first part of the analysis compares change between 2020/21 and 2019/20 (the period leading into the pandemic). The second part compares change between 2020/21 and 2021/22, covering the second 12-month period following the onset of the pandemic. The third part of the analysis compares changes before the onset of the pandemic (2019/20) and 2021/22. Expressed as questions we examine the following:

1. Compared with companies that did not receive government support, did companies receiving support experience a greater or lesser decline in pay ratios following the onset of the pandemic?
2. Compared with companies that did not receive government support, did companies receiving support experience a greater or lesser recovery in pay ratios after the first year of the pandemic?
3. Looking at the period after the first year of the pandemic compared with the 12-month period prior to the onset of the pandemic, did receipt of government support have any effect on pay ratios?

The estimation approach follows that taken in Chapter 4. A random-effects regression difference-in-difference model was estimated to address questions 1 and 2. A fixed-effects difference-in-difference model was estimated to address question 3. Models for pay ratios at the lower, median and upper employee pay quartiles are estimated separately for FTSE 100 and FTSE 250 companies. The key independent variables in the models are dummy variables indicating the time period, and dummy variables indicating whether or not a company received a government support.¹⁸⁹ In the random-effects models, dummy variables are entered to capture the 12-month period covering the onset of the pandemic (2020/21 and the 12-month period following this 2021/22). The reference time period is 2019/20, which covers the 12-month period prior to the onset of the pandemic. For the fixed-effects model (addressing question 3 above) we omit data covering the 12-month period during the onset of the pandemic (2020/21). The models control for a number of factors. To capture the influence of firm size, models control for annual turnover and number of employees. To capture firm performance, all models include a measure of Tobin's Q and a measure of return-on-assets (ROA). In addition, all models include a dummy variable indicating if there was a change in CEO or CFO in any 12-month reporting period. The random-effects models also include a set of dummy variables to capture the effect of industry. The regression output for random-effects models and ATET estimates of pay ratio models are reported in **Tables A5.2-5.11** in Appendix 5.

5.321 Change between 2019/20 and 2020/21: into the Peak of Economic Disruption

There was a substantial drop in pay ratios during the year in which government restrictions were at their peak (see **Table 5.27**). The results from the random-effects models (**Tables A5.2-A5.11**) show that the decrease in median and upper quartile pay ratios was marginally significantly greater for FTSE 100 companies that received CJRS grants and international wage support (receipt of Business Rates Relief was marginally significantly associated with a greater decrease in the upper quartile pay ratio only). Among FTSE 250 companies, receipt of CJRS grants was associated with a greater decrease in the pay ratio taken at the median

¹⁸⁹ With respect to supports, the analysis focuses on the four different schemes examined in Chapter 4 that were the most widely reported.

and upper quartiles, and receipt of Business Rates Relief was associated with a greater decrease in the pay ratio taken at the lower, median and upper quartiles. Receipt of deferred tax was significantly associated with a greater decrease in the upper pay ratio (with a marginally significant association found for the median pay ratio).

5.322 Change between 2020/21 and 2021/22: the Year Following the Peak of Economic Disruption

Pay ratios increased in the year in which the economy began to re-open (2021/22) (see **Table 5.23**). and results from the random-effects models (**Tables A5.2-A5.11**) show that the increase in the upper quartile pay ratio was significantly greater for FTSE 100 companies that received grants under CJRS (with a marginally significant association found for the median pay ratio). The increase in the upper quartile pay ratio was also higher for those companies receiving international wage support compared with FTSE 100 companies not in receipt of this support. Receipt of Business Rates Relief was associated with a greater increase in the pay ratio taken at the median and upper quartiles (with a marginally significant result found for pay ratios taken at the lower quartile). Lastly, receipt of CCFF was significantly associated with a greater increase in the pay ratio taken at the lower, median, and upper quartiles in FTSE 100 companies. Among FTSE 250 companies, receipt of CJRS grants, deferred tax and Business Rates Relief was significantly associated with a greater increase in the pay ratio taken at the lower, median, and upper quartiles.

5.323 Change between 2019/20 and 2021/22: before and 'after' the Beginning of the Pandemic

With a single exception there was no significant effects found in the fixed-effects difference-in-difference models testing differences in pay ratios in the 2021/22 period compared with the 2019/20 period prior to the pandemic. The sole exception relates to FTSE 100 companies that had arranged financed under CCFF, where there was a positive and significant effect indicating that pay ratios increased to a significantly greater extent in FTSE 100 companies receiving this support in comparison with those who did not.

Appendix 1 (Chapter 1)

1.1 Companies included in the Analysis

3i Group PLC, 4imprint Group PLC, 888 Holdings PLC, Abrdn PLC, Admiral Group PLC, AJ Bell PLC, Anglo American PLC, Antofagasta PLC, Ascential PLC, Ashmore Group PLC, Ashtead Group PLC, Associated British Foods PLC, Assura PLC, Aston Martin Lagonda Global Holdings PLC, AstraZeneca PLC, Auto Trader Group PLC, Aveva Group PLC, Aviva PLC, B&M European Value Retail SA, Babcock International Group PLC, BAE Systems PLC, Balfour Beatty PLC, Barclays PLC, Barratt Developments PLC, Beazley PLC, Bellway PLC, Berkeley Group Holdings (The) PLC, Bhp Group PLC, Biffa PLC, Big Yellow Group PLC, Bodycote PLC, BP PLC., Brewin Dolphin Holdings PLC, British American Tobacco PLC, British Land Company PLC(The), Britvic PLC, BT Group PLC, Bunzl PLC, Burberry Group PLC, C&C Group PLC, Cairn Energy PLC (Capricorn Energy), Capita PLC, Carnival PLC, Centamin PLC, Centrica PLC, Chemring Group PLC, Cineworld Group PLC, Clarkson PLC, Close Brothers Group PLC, CLS Holdings PLC, CMC Markets PLC, Coats Group PLC, Coca-Cola HBC AG, Compass Group PLC, Computacenter PLC, ContourGlobal PLC, Convatec Group PLC, Countryside Properties PLC, Cranswick PLC, Crest Nicholson Holdings PLC, CRH PLC, Croda International PLC, Currys PLC, DCC PLC, Dechra Pharmaceuticals PLC, Derwent London PLC, Diageo PLC, Diploma PLC, Direct Line Insurance Group PLC, Discoverie Group PLC, Diversified Energy Company PLC, Domino's Pizza Group PLC, Drax Group PLC, Dunelm Group PLC, Easyjet PLC, Electrocomponents PLC, Elementis PLC, Energean PLC, Entain PLC, Essentra PLC, Euromoney Institutional Investor PLC, Evraz PLC, Experian PLC, FDM Group (Holdings) PLC, Ferguson PLC, Ferrexpo PLC, FirstGroup PLC, Flutter Entertainment PLC, Frasers Group PLC, Fresnillo PLC, Future PLC, Games Workshop Group PLC, Genuit Group PLC, Genus PLC, GlaxoSmithKline PLC, Glencore PLC, Grafton Group PLC, Grainger PLC, Greencore Group PLC, Greggs PLC, Halma PLC, Harbour Energy PLC, Hargreaves Lansdown PLC, Hays PLC, Helios Towers PLC, Hikma Pharmaceuticals PLC, Hill & Smith Holdings PLC, Hilton Food Group PLC, Hiscox Ltd, Hochschild Mining PLC, Homeserve PLC, Howden Joinery Group PLC, HSBC Holdings PLC, Istock PLC, IG Group Holdings PLC, IMI PLC, Imperial Brands PLC, Inchcape PLC, Indivior PLC, Informa PLC, Integrafina Holdings PLC, Intercontinental Hotels Group PLC, International Consolidated Airlines Group Intertek Group PLC, Investec PLC, IP Group PLC, ITV PLC, IWG PLC, JD Sports Fashion PLC, Johnson Matthey PLC, JTC PLC, Jupiter Fund Management PLC, Just Group PLC, Kainos Group PLC, Kingfisher PLC, Lancashire Holdings Ltd, Land Securities Group PLC, Legal & General Group PLC, Lloyds Banking Group PLC, London Stock Exchange Group PLC, Man Group PLC, Marks And Spencer Group PLC,. Marshalls PLC, Mediclinic International PLC, Meggitt PLC, Melrose Industries PLC, Micro Focus International PLC, Mitchells & Butlers PLC, Mitie Group PLC, Mondi PLC, Moneysupermarket.Com Group PLC, Morgan Advanced Materials PLC, Morgan Sindall Group PLC, National Express Group PLC, National Grid PLC, NatWest Group PLC, NCC Group PLC, Next PLC, Ocado Group PLC, OSB Group PLC, Oxford Biomedica PLC, Oxford Instruments PLC, PageGroup PLC, Paragon Banking Group PLC, Pearson PLC, Pennon Group PLC, Persimmon PLC, Pets At Home Group PLC, Phoenix Group Holdings PLC, Playtech PLC, Plus500 Ltd, Polymetal Premier Foods PLC, Provident Financial PLC, Prudential PLC, PureTech Health PLC, PZ Cussons PLC, Qinetiq Group PLC, Quilter PLC, Rank Group PLC, Rathbone Brothers PLC, Reach PLC, Reckitt Benckiser Group PLC, Redde Northgate PLC, Redrow PLC, RELX PLC, Renishaw PLC, Rentokil Initial PLC, RHI Magnesita NV, Rightmove PLC, Rio Tinto PLC, Rolls-Royce Holdings PLC, Rotork PLC,. Royal Dutch Shell PLC, Royal Mail PLC, Safestore PLC, Sage Group PLC, Sainsbury (J) PLC, Savills PLC, Schroders PLC, Serco Group PLC, Severn Trent PLC, Sirius Real Estate Ltd, Smith & Nephew PLC, DS Smith PLC, Smiths Group PLC, Smurfit Kappa Group PLC, Softcat PLC, Spectris PLC, Spirax-Sarco Engineering PLC, Spire Healthcare Group PLC, Spirent Communications PLC, SSE PLC, SSP Group PLC, St. James's Place PLC, Standard Chartered PLC, Synthomer PLC, Tate & Lyle PLC, Taylor Wimpey PLC, Telecom Plus PLC, Tesco PLC, TI Fluid Systems PLC, TP ICAP Group PLC, Travis Perkins PLC, Tui AG, Tyman PLC, Ultra

Electronics Holdings PLC, Unilever PLC, Unite Group PLC, United Utilities Group PLC, Vesuvius PLC, Victrex PLC, Virgin Money UK PLC, Vistry Group PLC, Vivo Energy Vodafone Group PLC, Volution Group PLC, Watches Of Switzerland Group PLC, (The) Weir Group PLC, Wetherspoon (JD) PLC, WH Smith PLC, Whitbread PLC, Wizz Air Holdings PLC, Wood Group (John) PLC, WPP PLC, XP Power Limited.

1.2 Data Collation

1.2.1 Executive Pay

Executive pay (2015/16-2021/22) data were collated from company annual reports. Pay data for board executives (chief executive officers and, where relevant, financial officers or equivalents) were collated from directors' remuneration reports.¹⁹⁰ Presently, these include a single figure for total pay for each director,¹⁹¹ which includes all types of reward received. In addition, total pay is broken down into five component parts - basic salary and fees, taxable benefits, annual bonus,¹⁹² long-term incentive awards,¹⁹³ and pension related benefits.¹⁹⁴ These components were collated separately along with 'other' payments (such as 'Golden hellos'), 'All Employee' share plans, awards for IPO's, 'malus' or 'clawback'.

Changes in directors during reporting years were also recorded, along with start and end dates. Where directors moved between different roles within the company, remuneration data for each role were collated from annual reports and recalibrated according to number of days in office where relevant.

1.2.2 COVID-Related Supports

We identified COVID-related government support schemes relevant to larger businesses from government websites, announcements, and publications, using iteratively developed search terms. Scheme terms and government published firm-level support scheme data were obtained by searching government websites using the formal names of support schemes. Company reported firm-level support data was obtained in the first instance from group consolidated financial statements, using search terms associated with scheme names (e.g. furlough) and general search terms associated with government supports (e.g. grant). Where the value of supports was not reported or sufficiently disaggregated in consolidated financial statements we searched first-tier UK subsidiaries' financial statements using the same search strategy. Because of a lag between the publication of consolidated and subsidiary accounts, some companies recorded as not reporting the value of supports, may have reported their value subsequent to the study period.

¹⁹⁰ Directors of quoted companies and unquoted traded companies are required to prepare a directors' remuneration report under section 420(1) of the Companies Act 2006.

¹⁹¹ In practice this includes most CEOs (and equivalents) and CFOs (and equivalents). For reporting years beginning on or after 10 June 2019, CEOs (however described) and deputy CEOs (where the function exists and however described) are automatically treated as directors for remuneration reporting even where they are not directors of the company.

¹⁹² Money or other assets received or receivable for the financial year for achievement of performance measures and targets relating to a period ending in the financial year other than those which result from awards made in a previous financial year or subject to achievement of performance measures or targets in a future financial year

¹⁹³ All other awards where final vesting is determined as a result of performance measures or targets that end in the reporting year and which are not subject to achievement or performance measures or targets in subsequent reporting years

¹⁹⁴ Paragraph 7, Schedule 8 of the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulation 2008.

1.23 Pay Ratio Data

Pay ratio data (pay ratio and quartile employee pay data, reporting currency, method of calculation, whether companies had topped up pay for employees on furlough leave, whether and how companies had included employees on furlough leave in their calculations) were obtained from company reports.

Appendix 2 (Chapter 2)

2.1 Coronavirus Job Retention Scheme (CJRS)

2.1.1 Repayment of Grants received under CJRS and Earnings

On average of the 41 companies¹⁹⁵ that retained grants received under CJRS in 2020/21 generated lower earnings (mean EBITDA = £188,493,000, standard deviation = 726154793) in 2020/21 than the 37 companies that either fully or partially repaid the grants (mean EBITDA = £312,180,568, standard deviation = 600074871) (**Table A2.1**). However, the median EBITDA was higher for companies that retain CJRS grants (median EBITDA = £146,500,000) compared to those that fully or partially repaid them (median, £139,412,000). There was no statistically significant relationship between whether a company retained or repaid (fully or partially) grants received under CJRS in 2020/21 and earnings in 2020/21 [$t(80) = -0.829, p = 0.410$] (**Table A2.2**).

Table A2.1: Means, Standard Deviations, Standard Error Means: Repayment Status of CJRS Grants received in 2020/21 and EBITDA 2020/21

	N	Mean EBITDA 2020/21 (£)	Median EBITDA 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	45	£188,493,000	£146,500,000	726154793	108248765
Fully or partially repaid	37	£312,180,568	£139,412,000	600074871	98651701

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

¹⁹⁵ All figures for the number of companies referred to in section 2 of the Appendix relate to those with complete data. In some cases, the FAME database contains missing data. As a result, the number of companies cited as receiving grants under CJRS and business rates relief may vary.

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Table A2.2: Independent Samples T-Test: Repayment Status of CJRS Grants received in 2020/21 and EBITDA 2020/21

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference EBITDA 2020/21 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.392	.533	-.829	80	.410	-123687568	149209289	-420623516	173248381
Equal variances not assumed			-.845	79.996	.401	-123687568	146458026	-415148577	167773442

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 44 companies that retained grants received under CJRS in 2020/21 generated lower earnings in 2021/22 (mean EBITDA = £293,905,864, standard deviation = 753722771) than the 37 companies that either fully or partially repaid the grants (mean EBITDA = £426,860,081, standard deviation = 682473440) (**Table A2.3**). However, the median EBITDA was higher for companies that retain CJRS grants (median EBITDA = £249,800,000) compared to those that fully or partially repaid them (median, £230,539,000). There was no statistically significant relationship between whether a company retained or repaid (fully or partially) grants received under CJRS in 2020/21 and earnings in 2021/22 [$t(79) = -0.825, p = 0.575$] (**Table A2.4**).

Table A2.3: Means, Standard Deviations, Standard Error Means: Repayment Status of CJRS Grants received in 2020/21 and EBITDA 2021/22

	N	Mean EBITDA 2021/22 (£)	Median EBITDA 2021/22 (£)	Std. Deviation	Std. Error Mean
Retained	44	£293,905,864	£249,800,000	753722771	113627983
Fully or partially repaid	37	£426,860,081	£230,539,000	682473440	112197942

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.4: Independent Samples T-Test: Repayment Status of CJRS Grants received in 2020/21 and EBITDA 2021/22

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference EBITDA 2021/22 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.317	.575	-.825	79	.412	-132954217	161075298	-453566578	187658143
Equal variances not assumed			-.833	78.543	.408	-132954217	159686245	-450830468	184922034

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 26 companies that retained grants under CJRS received in 2021/22 generated lower earnings (mean EBITDA = £70,771,962, median = £137,300,000, standard deviation = 837372374) in 2020/21 than the 14 companies that either fully or partially repaid the grants (mean EBITDA = £472,688,143, median = £220,652,500, standard deviation = 554975236.6) (**Table A2.5**). However, there was no statistically significant relationship between whether a company retained or repaid (fully or partially) grants received under the CJRS in 2021/22 and earnings in 2020/21 [$t(38) = -1.627, p = 0.112$] (**Table A2.6**).

Table A2.5: Means, Standard Deviations, Standard Error Means: Repayment Status of CJRS Grants received in 2021/22 and EBITDA 2020/21

	N	Mean EBITDA 2020/21 (£)	Median EBITDA 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	26	£70,771,962	£137,300,000	837372374	164222234
Fully or partially repaid	14	£472,688,143	£220,652,500	524808306	140260920

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.6: Independent Samples T-Test: Repayment Status of CJRS Grants received in 2021/22 and EBITDA 2020/21

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference EBITDA 2020/21 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.005	.943	-1.627	38	.112	-401916181	247078483	-902100420	98268058
Equal variances not assumed			-1.861	36.957	.071	-401916181	215967.747	-839525438	35693076

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 24 companies that retained grants under CJRS received in 2021/22 generated lower earnings (mean EBITDA = £195,504,667, median = £230,450,000, standard deviation = 919818488) in 2021/22 than the 13 companies that either fully or partially repaid grants under the grants (mean EBITDA = £482,740,538, median = £268,174,000, standard deviation = 530060391) (**Table A2.7**). However, there was no statistically significant relationship between whether a company retained or repaid (fully or partially) grants received under the CJRS in 2021/22 and earnings in 2020/21 [$t(35) = -1.033$, $p = 0.627$] (**Table A2.8**).

Table A2.7: Means, Standard Deviations, Standard Error: Repayment Status of CJRS Grants received in 2021/22 and EBITDA 2021/22

	N	Mean EBITDA 2020/21 (£)	Median EBITDA 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	24	£195,504,667	£230,450,000	919818488	187757163
Fully or partially repaid	13	£482,740,538	£268,174,000	530060391	147012302

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.8: Independent Samples T-Test: Repayment Status of CJRS Grants received in 2021/22 and EBITDA 2021/22

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference EBITDA 2020/21 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.240	.627	-1.033	35	.309	-287235872	278133206	-851876298	277404554
Equal variances not assumed			-1.205	34.786	.237	-287235872	238464607	-771451128	196979385

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

2.12 Repayment of Grants received under CJRS and Share Dividends

On average the 47 companies that retained grants under CJRS in 2020/21 made lower dividend payments to shareholders (mean = £36,510,702, standard deviation = 86473360) in 2020/21 than the 38 companies that either fully or partially repaid the grants (mean = £48,505,658, standard deviation 132942222) (**Table A2.9**). However, there was no statistically significant relationship between whether a company retained or repaid (fully or partially) grants received under the CJRS in 2020/21 and dividend payments in 2020/21 [$t(83) = -.501, p = 0.617$] (**Table A2.10**).

Table A2.9: Means, Standard Deviations, Standard Error Mean: Repayment Status of CJRS Grants received in 2020/21 and Dividends paid in 2020/21

	N	Mean Dividend 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	47	£36,510,702	86473360	12613436
Fully or partially repaid	38	£48,505,658	132942222	21566076

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.10: Independent Samples T-Test: Repayment Status of CJRS Grants received in 2020/21 and Dividends paid in 2020/21

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference Dividend 2020/21 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	1.214	.274	-.501	83	.617	-11994956	23920615	-59572094	35582184
Equal variances not assumed			-.480	60.910	.633	-11994956	24983883	-61954809	37964893

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 47 companies that retained grants received under CJRS in 2020/21 made lower dividend payments to shareholders (mean = £18,639,021, standard deviation = 55268449) in the following year (2021/22) than the 38 companies that either fully or partially repaid the grants (mean = £46,797,500, standard deviation 54553094) (Table A2.11).

Table A2.11: Means, Standard Deviations, Standard Error Mean: Repayment Status of CJRS Grants received in 2020/21 and Dividends paid in 2021/22

	N	Mean Dividend 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	47	£18,639,021	55268449	8061732
Fully or partially repaid	38	£46,797,500	54553094	8849680

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

A Levene's Test for Equality of Variances suggests that variances within shareholder dividends do not meet the assumption of equal variances for an independent samples t-test. A Mann-Whitney *U* test comparing differences in shareholder dividend payments in 2021/22 for companies that retained and repaid business rates relief received in 2020/21 was, therefore, conducted. The test suggests that shareholder dividend payments for companies that repaid furlough received in 2020/21 were statistically greater than dividend payments for companies that grants received under CJRS for that year ($U = 1402.5$, $p = 0.000$) (Table A2.12).

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Table A2.12: Mann-Whitney U Test: Repayment Status of CJRS Grants received in 2020/21 and Dividends paid in 2021/22

Total N	85
Mann-Whitney U	1402.500
Wilcoxon W	2143.500
Test Statistic	1402.500
Standard Error	108.755
Standardized Test Statistic	4.685
Asymptotic Sig.(2-sided test)	.000

On average the 28 companies that retained grants received under the CJRS in 2021/22 (mean dividend pay-out to shareholders = £23,956,036, standard deviation = 62094215) made lower dividend payments to shareholders in 2020/21 than the 14 companies that either fully or partially repaid the grants (mean dividend payments to shareholders = £85,282,500, standard deviation 133398072) (**Table A2.13**).

Table A2.13: Means, Standard Deviations, Standard Error Mean: Repayment Status of CJRS Grants received in 2021/22 and Dividends paid in 2020/21

	N	Mean Dividend 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	28	£23,956,036	62094215	11734704
Fully or partially repaid	14	£85,282,500	133398072	35652134

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

A Levene's Test for Equality of Variances suggest that variances within shareholder dividends do not meet the assumption of equal variances for an Independent Samples T-Test. An Independent-Samples Mann-Whitney *U* test comparing differences in shareholder dividends in 2020/21 for companies that retained and repaid grants under CJRS received in 2021/22 was, therefore, conducted. The test suggests that there was no statistically significant relationship between whether a company retained or repaid (fully or partially) the grant and dividend payments ($U = 247, p = 0.180$) (**Table A2.14**).

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Table A2.14: Mann-Whitney U Test: Repayment Status of CJRS Grants received in 2021/22 and Dividends paid in 2020/21

Total N	42
Mann-Whitney U	247.000
Wilcoxon W	352.000
Test Statistic	247.000
Standard Error	34.268
Standardized Test Statistic	1.488
Asymptotic Sig.(2-sided test)	.137
Exact Sig.(2-sided test)	.180

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 28 companies that retained grants under CJRS received in 2021/22 made higher dividend payments in 2021/22 (mean = £19,158,143, standard deviation = 69004233) than the 14 companies that either fully or partially repaid the grants (mean = £14,086,286, standard deviation 22134882) (**Table A2.15**). However, there was no statistically significant relationship between whether a company retained or repaid (fully or partially) grants and dividend payments [$t(40) = 0.267$, $p = 0.791$] (**Table A2.16**).

Table A2.15: Means, Standard Deviations, Standard Error Mean: Repayment Status of CJRS Grants received in 2021/22 and Dividends paid in 2021/22

	N	Mean Dividend 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	28	£19,158,143	69004233	13040574
Fully or partially repaid	14	£14,086,286	22134882	5915796

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Table A2.16: Independent Samples T-Test: Repayment Status of CJRS Grants received in 2021/22 and Dividends paid in 2021/22

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference Dividend 2020/21 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	1.006	.322	.267	40	.791	5071857.14286	19011192.19060	-33351195.53394	43494909.81965
Equal variances not assumed			.354	36.083	.725	5071857.14286	14319679.41074	-23967492.27822	34111206.56393

2.13 Repayment of Grants received under CJRS and Executive Pay

Table A2.17: Median, Mean, Standard Deviations: Repayment Status of CJRS Grants received in 2020/21 and Percentage Change in Total Executive (CEO and CFO) Pay between 2019/20 and 2020/21

	N	Mean Percentage Change in Executive Pay 2019/20-2020/21 (%)	Median Percentage Change in Executive Pay 2019/20-2020/21 (%)	Std. Deviation
Retained	47	-18.7	-32.8	.81243
Fully or partially repaid	38	-16.1	-29.5	.51715

Table A2.18: Median, Mean and Standard Deviations: Repayment Status of CJRS Grants received in 2020/21 and Percentage Change in Total Executive (CEO and CFO) Pay between 2020/21 and 2021/22

	N	Mean Percentage Change in Executive Pay 2020/21-2021/22 (%)	Median Percentage Change in Executive Pay 2020/21-2021/22 (%)	Std. Deviation
Retained	47	66.8	45.6	.83027
Fully or partially repaid	38	101.1	77.2	.89736

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Table A2.19: Median, Mean and Standard Deviations: Repayment Status of CJRS Grants received in 2021/22 and Percentage Change in Total Executive (CEO and CFO) Pay between 2020/21 and 2021/22

	N	Mean Percentage Change in Executive Pay 2020/21-2021/22 (%)	Median Percentage Change in Executive Pay 2020/21-2021/22 (%)	Std. Deviation
Retained	27	45.9	27.5	.68864
Fully or partially repaid	13	102.6	140.9	.92693

Table A2.20: Median, Mean and Standard Deviations: Repayment Status of CJRS Grants received in 2020/21 and Percentage Change in Total Executive (CEO and CFO) Pay between 2019/20 and 2021/22

	N	Mean Percentage Change in Executive Pay 2019/20-2021/22 (%)	Median Percentage Change in Executive Pay 2019/20-2021/22 (%)	Std. Deviation
Retained	47	5.7	-7.5	.61040
Fully or partially repaid	38	45.9	35.9	.68669

Table A2.21: Median, Mean and Standard Deviations: Repayment Status of CJRS Grants received in 2021/22 and Percentage Change in Total Executive (CEO and CFO) Pay between 2019/20 and 2021/22

	N	Mean Percentage Change in Executive Pay 2019/20-2021/22 (%)	Median Percentage Change in Executive Pay 2019/20-2021/22 (%)	Std. Deviation
Retained	27	0.4	-8.9	.71109
Fully or partially repaid	13	17.0	-1.4	.46739

A three-stage hierarchical multiple regression was conducted to evaluate the effect of repayment status (fully/partially repaid) for grants received under CJRS in 2020/21 on percentage change in total executive pay between 2019/20 (the year immediately prior to the introduction of pandemic-related restrictions) and 2021/22 (the year following the peak period of economic distribution caused by the pandemic). Percentage change in EBITDA and market capitalisation over the period were entered at stage one and two of the regression as controls and status of repayment at stage three.

The results presented in **Table A2.22** suggest that the model is a statistically significant predictor of variance in total executive pay between 2019/20 and 2021/22. The results presented in **Tables A2.23 and A2.24** suggest that percentage change in EBITDA and market capitalisation account for about 16% of the variance in

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percentage change in executive pay between 2019/20 and 2021/22. Repayment status, by contrast, accounts for about 3% of the variance once percentage change in EBITDA and market capitalisation have been controlled for and does not make a statistically significant contribution to the model ($p = 0.099$).

Table A2.22: Anova: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2020/21

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.109	1	5.109	13.042	.001 ^{***a}
	Residual	30.165	77	.392		
	Total	35.274	78			
2	Regression	5.670	2	2.835	7.278	.001 ^{***b}
	Residual	29.604	76	.390		
	Total	35.274	78			
3	Regression	6.729	3	2.243	5.893	.001 ^{***c}
	Residual	28.545	75	.381		
	Total	35.274	78			

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS in 2020/21.

Table A2.23: Model Summary of Hierarchical Regression: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2020/21

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.381 ^a	.145	.134	.62590	.145	13.042	1	77	.001 ^{***}
2	.401 ^b	.161	.139	.62412	.016	1.439	1	76	.234
3	.437 ^c	.191	.158	.61693	.030	2.782	1	75	.099

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

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^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS in 2020/21.

Table A2.24: Hierarchical Regression Coefficients: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Business Rates Relief received in 2020/21

Model		Unstandard. Coeff.		Standard. Coeff.	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.141	.126		-1.118	.267					
	Percentage change in EBITDA 2019/20-2021/22	.000	.000	.381	3.611	.001***	.381	.381	.381	1.000	1.000
2	(Constant)	-.185	.131		-1.414	.161					
	(Percentage change in EBITDA 2019/20-2021/22)	.000	.000	.466	3.669	.000***	.381	.388	.386	.684	1.463
	Percentage change in Market Capitalisation for 2019/20-2021/22	-.155	.130	-.153	-1.200	.234	.110	-.136	-.126	.684	1.463
3	(Constant)	-.230	.132		-1.741	.086					
	Percentage change in EBITDA 2019/20-2021/22	.000	.000	.400	3.032	.003***	.381	.330	.315	.621	1.611
	Percentage change in Market Capitalisation for 2019/20-2021/22	-.159	.128	-.156	-1.242	.218	.110	-.142	-.129	.683	1.463
	Repayment Status of Grants received under the CJRS received in 2020/21	.251	.150	.186	1.668	.099*	.299	.189	.173	.864	1.157

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A three-stage hierarchical multiple regression was conducted to evaluate the effect of repayment status (fully/partially repaid) for grants received under CJRS in 2021/22 on percentage change in total executive pay between 2019/20 (the year immediately prior to the introduction of pandemic-related restrictions) and 2021/22 (the year following the peak period of economic distribution caused by the pandemic). Percentage change in EBITDA and market capitalisation over the period were entered at stage one and two of the regression as controls and status of repayment at stage three.

The results presented in **Table A2.25A** suggest that the model is not a statistically significant predictor of variance in total executive pay between 2019/20 and 2021/22. The results presented in **Tables 2.26A and 2.27A** suggest that percentage change in EBITDA and market capitalisation account for about 12% of the variance in percentage change in executive pay between 2019/20 and 2021/22. Repayment status accounts for under <0% of the variance once percentage change in EBITDA and market capitalisation have been controlled for and does not make a statistically significant contribution to the model ($p = 0.920$).

Table A2.25: Anova: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2021/22

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.593	1	1.593	4.267	.047 ^{**a}
	Residual	12.692	34	.373		
	Total	14.285	35			
2	Regression	1.710	2	.855	2.244	.122 ^{**b}
	Residual	12.574	33	.381		
	Total	14.285	35			
3	Regression	1.714	3	.571	1.455	.245 ^c
	Residual	12.570	32	.393		
	Total	14.285	35			

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS in 2021/22.

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Table A2.26: Model Summary of Hierarchical Regression: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2021/22

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.334 ^a	.112	.085	.61097	.112	4.267	1	34	.047**
2	.346 ^b	.120	.066	.61729	.008	.308	1	33	.583
3	.346 ^c	.120	.038	.62676	.000	.010	1	32	.920

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS in 2021/22.

Table A2.27: Model Summary of Hierarchical Regression: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Grants received under the CJRS received in 2021/22

Model		Unstandard. Coeff.		Standard. Coeff.	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.174	.160		-1.083	.286					
	Percentage change in EBITDA 2019/20-2021/22	.000	.000	.334	2.066	.047**	.334	.334	.334	1.000	1.000
2	(Constant)	-.192	.165		-1.160	.254					
	(Percentage change in EBITDA 2019/20-2021/22)	.000	.000	.370	2.105	.043**	.334	.344	.344	.863	1.158
	Percentage change in Market Capitalisation for 2019/20-2021/22	-.111	.200	-.097	-.555	.583	.039	-.096	-.091	.863	1.158
3	(Constant)	-.197	.174		-1.128	.268					

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Percentage change in EBITDA 2019/20-2021/22	.000	.000	.366	2.006	.053*	.334	.334	.333	.825	1.211
Percentage change in Market Capitalisation for 2019/20-2021/22	-.117	.212	-.103	-.553	.584	.039	-.097	-.092	.793	1.261
Repayment Status of Grants received under the CJRS received in 2020/21	.025	.244	.019	.102	.920	.097	.018	.017	.826	1.210

2.2 Business Rates Relief

2.21 Repayment of Business Rates Relief and Earnings

On average the 18 companies that retained business rates relief received in 2020/21 (mean EBITDA = £366,651,111, median EBITDA = £185,668,500, standard deviation = 481195921) generated lower earnings (EBITDA) than the 11 companies that either fully or partially repaid relief received in 2020/21 (mean EBITDA = £985,509,364, median EBITDA = £520,700,000, standard deviation = 1260997616) received in 2020/21 (**Table A2.28**). An independent samples t-test indicates there was no statistically significant relationship between whether a company retained or repaid (fully or partially) business rates received relief in 2020/21 and earnings in 2020/21 [$t(27) = -1.887, p = 0.070$] (**Table A2.29**).

Table A2.28: Means, Standard Deviations, Standard Error Mean of EBITDA 2020/21: Companies that retained or (fully or partially) Business Rates Relief received in 2020/21

	N	Mean EBITDA 2020/21 (£)	Median EBITDA 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	18	£366,651,111	£185,668,500	481195921	113418966
Fully or partially repaid	11	£985,509,364	£520,700,000	1260997616	380205087

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.29: Independent Samples T-Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2020/21 and EBITDA 2020/21

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference EBITDA 2020/21 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	4.148	.052	-1.887	27	.070	-618858253	328040828	-1291942435	54225930
Equal variances not assumed			-1.560	11.804	.145	-618858253	396761603	-1484922372	247205867

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 17 companies that retained business rates relief received in 2020/21 (mean EBITDA = £492,343,588, median = £385,588,000, standard deviation = 511767919) generated lower earnings (EBITDA) in 2021/22 than the 9 companies that either fully or partially repaid relief (mean EBITDA = £1,228,900,000, median = £533,400,000, standard deviation = 1384630990) received in 2021/22 (**Table A2.30**). The results of a Levene's Test for Equality of Variances suggest that variances within EBITDA do not meet the assumption of equal variances (at $p = 0.01$). A Mann-Whitney U test comparing differences in EBITDA in 2021/22 for companies that retained and repaid business rates relief received in 2020/21 was, therefore, conducted. The test suggests that EBITDA for companies that repaid business rates relief was not statistically significantly higher than EBITDA for companies that retained business rates relief ($U = 108$, $p = 0.095$) (**Table A2.31**).

Table A2.30: Means, Standard Deviations, Standard Error Mean of EBITDA 2021/22: Companies that retained or (fully or partially) Business Rates Relief in 2020/21

	N	Mean EBITDA 2021/22 (£)	Median EBITDA 2021/22 (£)	Std. Deviation	Std. Error Mean
Retained	17	£492,343,588	£385,588,000	511767919	124121952
Fully or partially repaid	9	£1,228,900,000	£533,400,000	1384630990	461543663

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.31: Mann-Whitney U Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2020/21 and EBITDA 2021/22

Total N	26
Mann-Whitney U	108.000
Wilcoxon W	153.000
Test Statistic	108.000
Standard Error	18.554
Standardized Test Statistic	1.698
Asymptotic Sig.(2-sided test)	.090
Exact Sig.(2-sided test)	.095

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 16 companies that retained business rates relief received in 2021/22 (mean EBITDA = £339,601,250, median = £185,668,500, standard deviation = 462850239) generated lower earnings (EBITDA) in 2020/21 than the 9 companies that either fully or partially repaid relief (mean EBITDA £1,201,989,222, median = £833,803,000, standard deviation = 1318735798) (**Table A2.32**). The results of a Levene's Test for Equality of Variances suggest that variances within EBITDA do not meet the assumption of equal variances (at $p = 0.05$, but not $p = 0.01$). A Mann-Whitney U test comparing differences in EBITDA in 2021/22 for companies that retained and repaid business rates relief received in 2020/21 was, therefore, conducted. The test suggests that EBITDA for companies that repaid business rates relief was statistically significantly higher than EBITDA for companies that retained business rates relief ($U = 117$, $p = 0.010$) (**Table A2.33**).

Table A2.32: Means, Standard Deviations, Standard Error Mean of EBITDA 2020/21: Companies that retained or (fully or partially) Business Rates Relief received in 2021/22

	N	Mean EBITDA 2020/21 (£)	Median EBITDA 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	16	£339,601,250	£185,668,500	477905341	119476335
Fully or partially repaid	9	£1,201,989,222	£833,803,000	1318735798	439578599

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.33: Mann-Whitney U Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2021/22 and EBITDA 2020/21

Total N	25
Mann-Whitney U	117.000
Wilcoxon W	162.000
Test Statistic	117.000
Standard Error	17.664
Standardized Test Statistic	2.548
Asymptotic Sig.(2-sided test)	.011
Exact Sig.(2-sided test)	.010

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 15 companies that retained business rates relief received in 2021/22 (mean EBITDA = £404,549,400, median = £258,700,000, standard deviation = 462850239) generated lower earnings (EBITDA) than the 7 companies that either fully or partially repaid relief received in 2021/22 (mean EBITDA £1,541,385,714, median = £1,123,700,000, standard deviation = 1465777611) in 2021/22 (**Table A2.34**). The results of a Levene's Test for Equality of Variances suggest that variances within EBITDA do not meet the assumption of equal variances (at $p = 0.01$). A Mann-Whitney U test comparing differences in EBITDA in 2021/22 for companies that retained and repaid business rates relief received in 2021/22 was, therefore, conducted. The test suggests that EBITDA for companies that repaid business rates relief was not statistically significantly higher than EBITDA for companies that retained business rates relief ($U = 84$, $p = 0.026$) (**Table A2.35**).

Table A2.34: Means, Standard Deviations, Standard Error Mean of EBITDA 2021/22: Companies that retained or (fully or partially) Business Rates Relief received in 2021/22

	N	Mean EBITDA 2021/22 (£)	Median EBITDA 2021/22 (£)	Std. Deviation	Std. Error Mean
Retained	15	£404,549,400	£258,700,000	462850239	119507418
Fully or partially repaid	7	£1,541,385,714	£1,123,700,000	1465777611	554011862

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.35: Mann-Whitney U-Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2021/22 and EBITDA 2021/22

Total N	22
Mann-Whitney U	84.000
Wilcoxon W	112.000
Test Statistic	84.000
Standard Error	14.186
Standardized Test Statistic	2.220
Asymptotic Sig.(2-sided test)	.026
Exact Sig.(2-sided test)	.026

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

2.22 Repayment of Business Rates Relief and Dividends

On average the 18 companies that retained business rates relief received in 2020/21 (mean dividend = £33,732,833, standard deviation = 66748459) paid out less in dividends in 2020/21 than the 11 companies that either fully or partially repaid the relief (mean dividend = £646,117,909, standard deviation = 1749808264) (**Table A2.37**). The results of a Levene's Test for Equality of Variances suggest that variances within dividends paid in 2020/21 do not meet the assumption of equal variances (at $p = 0.05$ but not $p = 0.01$). A Mann-Whitney U test was, therefore, conducted. The test suggests there was no statistically significant relationship between whether a company retained or repaid (fully or partially) business rates relief received in 2020/21 and dividend pay-outs in 2020/21 [$U = 120, p = 0.363$] (**Tables A2.38**).

Table A2.37: Means, Standard Deviations, Standard Error Mean of Dividends paid in 2020/21: Companies that retained or (fully or partially) Business Rates Relief received in 2020/21

	N	Mean Dividend 2021/22 (£)	Std. Deviation	Std. Error Mean
Retained	18	£33,732,833	66748459	15732763
Fully or partially repaid	11	£646,117,909	1749808264	527587042

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.38: Mann-Whitney U Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2020/21 and Dividend Payments 2020/21

Total N	29
Mann-Whitney U	120.000
Wilcoxon W	186.000
Test Statistic	120.000
Standard Error	20.657
Standardized Test Statistic	1.017
Asymptotic Sig.(2-sided test)	.309
Exact Sig.(2-sided test)	.363

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 18 companies that retained business rates relief received in 2020/21 (mean dividend = £29,621,222, standard deviation = 81742174) paid out less in dividends in 2021/22 than the 11 companies that either fully or partially repaid the relief (mean dividend = £131,000,000, standard deviation = 211004005) (**Table A2.39**). An independent samples t-test indicates there was no statistically significant relationship between whether a company retained or repaid (fully or partially) business rates received relief in 2020/21 and dividend payments in 2021/22 [$t(27) = -1.841$, $p = 0.077$] (**Table A2.40**).

Table A2.39: Means, Standard Deviations, Standard Error Mean: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2020/21 and Dividend Payments 2021/22

	N	Mean Dividend Payment 2021/22 (£)	Std. Deviation	Std. Error Mean
Retained	18	£29,621,222	81742174	19266815
Fully or partially repaid	11	£131,000,000	211004005	63620101

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.40: Independent Samples T-Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2020/21 and Dividend Payments 2021/22

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference Dividend Payments 2021/21 (£)	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	3.960	.057	-1.841	27	.077	-101378778	55057870	-214348196	11590641
Equal variances not assumed			-1.525	11.860	.153	-101378778	66473509	-246402378	43644822

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 16 companies that retained business rates relief received in 2021/22 (mean dividend payment = £37,949,438, standard deviation = 69847826) paid out less in dividends in 2020/21 than the 9 companies that either fully or partially repaid the relief (mean dividend payment = £789,699,667, standard deviation = 1923467293) (**Table A2.41**). The results of a Levene's Test for Equality of Variances suggest that variances within dividends paid for 2020/21 do not meet the assumption of equal variances (at $p = 0.01$). A Mann-Whitney U Test was, therefore, conducted. The test suggests that there was no statistically significant relationship between whether a company retained or repaid (fully or partially) business rates relief in 2021/22 and dividend payments in 2020/21 [$U = 95, p = 0.207$] (**Tables A2.42**).

Table A2.41: Means, Standard Deviations, Standard Error Mean of Dividend Payments in 2020/21: Companies that retained or (fully or partially) Business Rates Relief in 2021/22

	N	Mean Dividend Payments 2020/21 (£)	Std. Deviation	Std. Error Mean
Retained	16	£37,949,438	69847826	17461956
Fully or partially repaid	9	£789,699,667	1923467293	641155764

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

Table A2.42: Mann-Whitney U Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2021/22 and Dividend Payments 2020/21

Total N	25
Mann-Whitney U	95.000

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Wilcoxon W	140.000
Test Statistic	95.000
Standard Error	16.900
Standardized Test Statistic	1.361
Asymptotic Sig.(2-sided test)	.174
Exact Sig.(2-sided test)	.207

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

On average the 16 companies that retained business rates relief received in 2021/22 (mean dividend payment £10,861,375, standard deviation = 23936084) paid out less in dividends in 2021/22 than the 9 companies that either fully or partially repaid the relief (mean dividend payment = £166,033,333, standard deviation = 243128459) (**Table A2.43**). The results of a Levene's Test for Equality of Variances suggest that variances within dividend payments for 2021/22 do not meet the assumption of equal variances (at $p = 0.01$). A Mann-Whitney U Test was, therefore, conducted. The test suggests that companies that repaid business rates relief received in 2021/22 made statistically higher dividend payments in 2021/22 compared to those that retained the relief at $p = 0.05$ but not $p = 0.01$ [$U = 110$, $p = 0.032$] (**Tables A2.44**).

Table A2.43: Means, Standard Deviations, Standard Error Mean of Dividend Payments in 2021/22: Companies that retained or (fully or partially) Business Rates Relief in 2021/22

	N	Mean Dividend Payment 2021/22 (£)	Std. Deviation	Std. Error Mean
Retained	16	£10,861,375	23936084	5984021
Fully or partially repaid	9	£166,033,333	243128459	81042820

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

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Table A2.44: Mann-Whitney U Test: Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2021/22 and Dividend Payments 2021/22

Total N	25
Mann-Whitney U	110.000
Wilcoxon W	155.000
Test Statistic	110.000
Standard Error	15.646
Standardized Test Statistic	2.429
Asymptotic Sig.(2-sided test)	.015
Exact Sig.(2-sided test)	.032

Source: FTSE 350 Company annual reports and accounts, 2020-2022, FAME, Moody's Analytics

2.23 Repayment of Business Rates Relief and Executive Pay

Table A2.45: Median, Mean and Standard Deviations of Percentage Change in Total Executive (CEO and CFO) Pay between 2019/20 and 2020/21 at Companies that retained or (fully or partially) Business Rates Relief in 2020/21

	N	Mean Percentage Change in Executive Pay 2019/20-2020/21 (%)	Median Percentage Change in Executive Pay 2019/20-2020/21 (%)	Std. Deviation
Retained	18	4.3	-33.1	1.20136
Fully or partially repaid	11	14.1	7.5	.75426

Table A2.46: Median, Mean and Standard Deviations of Percentage Change in Total Executive (CEO and CFO) Pay between 2020/21 and 2021/22 at Companies that retained or (fully or partially) Business Rates Relief in 2020/21

	N	Mean Percentage Change in Executive Pay 2020/21-2021/22 (%)	Median Percentage Change in Executive Pay 2020/21-2021/22 (%)	Std. Deviation
Retained	17	81.2	45.6	1.06125
Fully or partially repaid	10	109.2	81.6	1.02122

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Table A2.47: Median, Mean and Standard Deviations of Percentage Change in Total Executive (CEO and CFO) Pay between 2020/21 and 2021/22 at Companies that retained or (fully or partially) Business Rates Relief in 2021/22

	N	Mean Percentage Change in Executive Pay 2020/21-2021/22 (%)	Median Percentage Change in Executive Pay 2020/21-2021/22 (%)	Std. Deviation
Retained	15	89.5	62.3	1.07135
Fully or partially repaid	8	67.2	28.6	.88984

Table A2.48: Median, Mean and Standard Deviations of Percentage Change in Total Executive (CEO and CFO) Pay between 2019/20 and 2021/22 at Companies that retained or (fully or partially) Business Rates Relief in 2020/21

	N	Mean Percentage Change in Executive Pay 2019/20-2021/22 (%)	Median Percentage Change in Executive Pay 2019/20-2021/22 (%)	Std. Deviation
Retained	17	25.4	-8.9	.95882
Fully or partially repaid	10	76.6	47.7	.70729

Table A2.49: Median, Mean and Standard Deviations of Percentage Change in Total Executive (CEO and CFO) Pay between 2019/20 and 2021/22 at Companies that retained or (fully or partially) Business Rates Relief in 2021/22

	N	Mean Percentage Change in Executive Pay 2019/20-2021/22 (%)	Median Percentage Change in Executive Pay 2019/20-2021/22 (%)	Std. Deviation
Retained	15	34.0	-8.5	1.00631
Fully or partially repaid	8	78.6	43.1	.79533

A three-stage hierarchical multiple regression was conducted to evaluate the effect of repayment status (fully/partially repaid) for business rates relief received in 2020/21 on percentage change in total executive pay between 2019/20 (the year immediately prior to the introduction of pandemic-related restrictions) and 2021/22 (the year following the peak period of economic distribution caused by the pandemic). Percentage change in EBITDA and market capitalisation over the period were entered at stage one and two of the regression as controls and status of repayment at stage three.

The results presented in **Table A2.50** suggest that the model is a statistically significant predictor of variance in total executive pay between 2019/20 and 2021/22. The results presented in **Tables A2.51 and A2.52** suggest that percentage change in EBITDA and market capitalisation account for about 59% of the variance in

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percentage change in executive pay between 2019/20 and 2021/22. Repayment status, by contrast, accounts for about 3% of the variance one percentage change in EBITDA and market capitalisation have been controlled for and does not make a statistically significant contribution to the model ($p = 0.213$).

Table A2.50: Anova: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Business Rates Relief received in 2020/21

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.787	1	7.787	15.616	.001 ^{***a}
	Residual	11.469	23	.499		
	Total	19.256	24			
2	Regression	11.368	2	5.684	15.852	.000 ^{***b}
	Residual	7.888	22	.359		
	Total	19.256	24			
3	Regression	11.942	3	3.981	11.429	.000 ^{***c}
	Residual	7.314	21	.348		
	Total	19.256	24			

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status of Business Rates Relief (partially/fully repaid or retained) received in 2020/21.

Table A2.51: Model Summary of Hierarchical Regression: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Business Rates Relief received in 2020/21

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.636 ^a	.404	.378	.70616	.404	15.616	1	23	.001 ^{***}
2	.768 ^b	.590	.553	.59880	.186	9.987	1	22	.005 ^{***}
3	.788 ^c	.620	.566	.59016	.030	1.649	1	21	.213

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

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^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status of Business Rates Relief (partially/fully repaid or retained) received in 2020/21.

Table A2.52: Hierarchical Regression Coefficients: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Business Rates Relief received in 2020/21

Model		Unstandard. Coeff.		Standard. Coeff.	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.619	.304		-2.038	.053					
	Percentage change in EBITDA 2019/20-2021/22	.001	.000	.636	3.952	.001***	.636	.636	.636	1.000	1.000
2	(Constant)	-.322	.274		-1.172	.254					
	(Percentage change in EBITDA 2019/20-2021/22)	.001	.000	.349	2.130	.045**	.636	.413	.291	.693	1.442
	Percentage change in Market Capitalisation for 2019/20-2021/22	.595	.188	.518	3.160	.005***	.711	.559	.431	.693	1.442
3	(Constant)	-.349	.271		-1.287	.212					
	Percentage change in EBITDA 2019/20-2021/22	.001	.000	.285	1.689	.106	.636	.346	.227	.634	1.578
	Percentage change in Market Capitalisation for 2019/20-2021/22	.627	.187	.545	3.347	.003***	.711	.590	.450	.681	1.468
	Repayment Status of Business Rates Relief received in 2020/21	.328	.255	.181	1.284	.213	.281	.270	.173	.912	1.096

A three-stage hierarchical multiple regression was conducted to evaluate the effect of repayment status (fully/partially repaid) for business rates relief received in 2021/22 on percentage change in total executive pay between 2019/20 (the year immediately prior to the introduction of pandemic-related restrictions) and 2021/22

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(the year following the peak period of economic distribution caused by the pandemic). Percentage change in EBITDA and market capitalisation over the period were entered at stage one and two of the regression as controls and status of repayment at stage three.

The results presented in **Table A2.53** suggest that the model is a statistically significant predictor of variance in total executive pay between 2019/20 and 2021/22. The results presented in **Tables A2.54 and A2.55** suggest that percentage change in EBITDA and market capitalisation account for just under 60% of the variance in percentage change in executive pay between 2019/20 and 2021/22. Repayment status, by contrast, accounts for about 2% of the variance once percentage change in EBITDA and market capitalisation have been controlled for and does not make a statistically significant contribution to the model ($p = 0.377$).

Table A2.53: Anova: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Business Rates Relief received in 2021/22

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.470	1	7.470	13.665	.002*** ^a
	Residual	10.387	19	.547		
	Total	17.857	20			
2	Regression	11.284	2	5.642	15.450	.000*** ^b
	Residual	6.573	18	.365		
	Total	17.857	20			
3	Regression	11.587	3	3.862	10.472	.000*** ^c
	Residual	6.270	17	.369		
	Total	17.857	20			

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status of Business Rates Relief (partially/fully repaid or retained) received in 2020/21.

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Table A2.54: Model Summary of Hierarchical Regression: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Repayment Status (partially/fully repaid or retained) of Business Rates Relief received in 2021/22

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.647 ^a	.418	.388	.73937	.418	13.665	1	19	.002***
2	.795 ^b	.632	.591	.60429	.214	10.443	1	18	.005***
3	.806 ^c	.649	.587	.60730	.017	.822	1	17	.377

^a Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22.

^b Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22.

^c Predictors: (Constant), Percentage change in EBITDA 2019/20-2021/22, Percentage change in Market Capitalisation for 2019/20-2021/22, Repayment Status of Business Rates Relief (partially/fully repaid or retained) received in 2020/21.

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Table A2.55: Hierarchical Regression Coefficients: Percentage Change in Total Executive Pay between 2019/20 and 2021/22 and Company Retention or (Full or Partial) Repayment of Business Rates Relief received in 2021/22

Model		Unstandard. Coeff.		Standard. Coeff.	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.584	.333		-1.751	.096					
	Percentage change in EBITDA 2019/20-2021/22	.001	.000	.647	3.697	.002***	.647	.647	.647	1.000	1.000
2	(Constant)	-.306	.286		-1.073	.298					
	(Percentage change in EBITDA 2019/20-2021/22)	.001	.000	.371	2.231	.039**	.647	.465	.319	.738	1.355
	Percentage change in Market Capitalisation for 2019/20-2021/22	.599	.185	.538	3.232	.005***	.728	.606	.462	.738	1.355
3	(Constant)	-.355	.292		-1.216	.240					
	Percentage change in EBITDA 2019/20-2021/22	.001	.000	.344	2.026	.059*	.647	.441	.291	.715	1.398
	Percentage change in Market Capitalisation for 2019/20-2021/22	.605	.186	.543	3.246	.005***	.728	.619	.467	.737	1.357
	Repayment Status of Business Rates Relief received in 2020/21	.256	.282	.133	.907	.377	.230	.215	.130	.965	1.036

Appendix 3 (Chapter 3)

Table A3.1: Subsidies received by fully owned Subsidiaries of IHC May Fair Hotel Ltd.

Company Name	Principal Activity	Grant Value (Year ending 31 Dec 2020)	Accounting and disclosure of Grants	Business Rates Relief (Year ending 31 Dec 2020)	Disclosure of Business Rates
Blythswood Square Hotel Glasgow OPCO Ltd	Operation of Kimpton Hotel, Glasgow	£929,000[296]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	£373,000[296]	Strategic Report – single sentence under Business Review.
Edinburgh George St. Hotel OPCO Ltd	Operation of InterContinental Hotel, Edinburgh	£1,430,000[297]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	£470,000[297]	Strategic Report – single sentence under Business Review.
Grand Central Glasgow Hotel OPCO Ltd	Operation of Vovo Hotel, Glasgow	£1,047,000[298]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	£470,000[298]	Strategic Report – single sentence under Business Review.
Manchester Oxford St Hotel OPCO Ltd	Operation of Kimpton Hotel, Manchester	£1,688,000[299]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	£336,000[299]	Strategic Report – single sentence under Business Review.
Met Leeds Hotel OPCO Ltd	Operation of a hotel in King Street, Leeds	£374,000[300]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	None reported	n/a

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Oxford Spires Hotel OPCO Ltd	Operation of Vovo Hotel, Oxford	£448,000[301]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	£386,000[301]	Strategic Report – single sentence under Business Review.
Oxford Thames Hotel OPCO Ltd	Operation of Vovo Hotel, Oxford	356,000[302]	Government support received in respect of employee costs at the hotel	None reported	n/a
Roxburghe Hotel Edinburgh OPCO Ltd	Operation of Kimpton Hotel, Edinburgh	£1,108,000[303]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	£470,000[303]	Strategic Report – single sentence under Business Review.
Russell London Hotel OPCO Ltd	Operation of Kimpton Hotel, London	£2,025,000[304]	Accounting: Income Statement - Other operating income. Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	£1,525,000[304]	Strategic Report – single sentence under Business Review.
St David's Cardiff Hotel OPCO Ltd	Operation of Vovo Hotel, Cardiff	£800,000[305]	In the notes to the financial statements. As a separate item under 'other operating income'. Described as 'government support received in respect of employee costs at the hotel'.	None reported	n/a
The Grand Central Hotel Glasgow Ltd	Investment holding company	£0[306]	n/a	£0[306]	n/a
The Met Hotel Leeds Ltd	Investment holding company (dormant)	£0[307]	n/a	£0[307]	n/a
The Principal Edinburgh George Street Ltd	Investment holding company	£0[308]	n/a	£0[308]	n/a
The Principal London Ltd	Investment holding company	£0[309]	n/a	£0[309]	n/a
The Principal Manchester Ltd	Investment holding company	£0[310]	n/a	£0[310]	n/a
The Principal York Ltd	Investment holding company	£0[311]	n/a	£0[311]	n/a

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The Roxburghe Hotel Edinburgh Ltd	Investment holding company	£0[312]	n/a		£0[312]	n/a
The Wotton House Hotel OPCO Ltd	Operation of Wotton House Hotel, Guildford	£501,000[313]	Government support received in respect of employee costs at the hotel		None reported	n/a
York Station Road Hotel OPCO Ltd	Operation of York Station Hotel, York	£721,000[314]	Disclosure: Notes to the Financial Statements; separate item under 'Other Operating Income'; description - 'government support received in respect of employee costs at the hotel'.	Accounting: Income Statement - Other operating income.	£448,000[314]	Strategic Report – single sentence under Business Review.
Total		£11,427,000			£4,092,386	

Appendix 4 (Chapter 4)

Regression models for remuneration and its components control for a number of factors relating to firms known to be associated with executive remuneration [220] and capital distributions to shareholders [315]. To capture the influence of firm size [316, 317], models control for annual turnover and number of employees. To capture firm performance, models include a measure of Tobin's Q¹⁹⁶ and a measure of return-on-assets (ROA).¹⁹⁷ In addition, all models include a dummy variable indicating if there was a change in CEO or CFO in any 12-month reporting period. The random-effects models also include a set of dummy variables to capture the effect of industry. In addition to these controls, the models for shareholder dividends reported on below also control for EBITDA and a measure of return-on-equity (ROE).

Table A4.1: Random-effects Coefficients from Models of logged CEO Pay in FTSE 100 Companies: CJRS Grants

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.091	0.004	-0.276*	-0.002	0.033	-0.283***
2021/q2 – 2022/q1	0.132+	0.340***	0.005	0.017	-0.199	-0.420***
Received CJRS grants	-0.186	-0.315	-0.109	-0.073	-0.517	-0.224
Received CJRS grants * 20/q2	-0.538**	0.027	-0.677+	-0.098**	-0.269	0.158
Received CJRS grants * 21/q2	-0.168	0.076	-0.364	0.000	-0.443	0.280+
Change in CEO - Yes	-0.161	-0.322*	-0.229	0.020	0.483*	-0.069
Log turnover	0.230***	0.205***	0.160+	0.109***	0.175	0.268***
Number of employees ('000s)	-0.001	-0.000	-0.000	0.000	-0.001	-0.000
ROA	-0.005	0.006	-0.006	-0.005***	-0.015	-0.007
Tobin's Q	0.028	-0.005	0.032	0.020***	0.013	0.057*
Manufacture	0.345	0.519*	-0.241	0.254*	0.752	0.340
Construction	0.249	0.497	-0.070	0.107	0.651	0.358
Retail	0.263	0.358	0.013	0.089	0.504	0.080
Transport/storage	-0.391	-0.064	-0.853	-0.125	1.154	-0.064
Accommodation/food	0.411	0.835+	-0.543	0.174	0.870	0.630
Information/communication	0.293	0.477+	-0.175	0.174	0.360	-0.026
Finance/insurance/real estate	0.162	0.573*	-0.213	0.382**	0.093	-0.299

¹⁹⁶ Book value of total assets minus the book value of common equity plus the market value of common equity divided by the book value of total assets

¹⁹⁷ Net income divided by total assets.

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Professional/science/technology	0.298	0.435 ⁺	-0.317	0.071	0.213	0.200
Services	0.735 [*]	0.800 [*]	0.399	0.163	0.323	0.195
Intercept	4.362 ^{***}	3.264 ^{***}	4.999 ^{***}	4.926 ^{***}	0.952	0.916
N	256	208	182	256	251	238

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.2: Random-effects coefficients from models of logged CEO remuneration in FTSE 100 companies: International wage support

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.150*	-0.001	-0.376**	-0.012	-0.048	-0.279***
2021/q2 – 2022/q1	0.129+	0.361***	-0.041	0.017	-0.229+	-0.380***
Received intl. wage support	-0.061	-0.031	-0.263	-0.041	-0.223	-0.173
Received intl. wage support * 20/q2	-0.481*	0.251	0.002	-0.088*	0.144	0.247
Received intl. wage support * 21/q2	-0.269	-0.028	-0.168	-0.005	-0.509	0.153
Change in CEO – YES	-0.128	-0.313*	-0.234	0.025	0.519**	-0.070
Log turnover	0.222***	0.197***	0.153	0.109***	0.156	0.269***
Number of employees ('000s)	-0.001	0.000	0.000	0.000	-0.000	-0.001
ROA	-0.003	0.005	-0.002	-0.005***	-0.014	-0.007
Tobin's Q	0.018	-0.007	0.022	0.019***	0.000	0.056*
Manufacture	0.336	0.495*	-0.252	0.250*	0.707	0.334
Construction	0.100	0.386	-0.328	0.071	0.377	0.330
Retail	0.237	0.264	0.001	0.081	0.388	0.070
Transport/storage	-0.418	-0.151	-0.840	-0.134	1.064	-0.062
Accommodation/food	0.307	0.585	-0.576	0.143	0.447	0.602
Information/communication	0.163	0.407	-0.333	0.131	0.147	-0.045
Finance/insurance/real estate	0.158	0.564*	-0.222	0.382**	0.081	-0.302
Professional/science/technology	0.216	0.351	-0.380	0.051	0.035	0.181
Services	0.638*	0.700*	0.311	0.141	0.100	0.191
Intercept	4.493***	3.395***	5.142***	4.929***	1.280	0.884
N	256	208	182	256	251	238

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.3: Random-effects Coefficients from Models of logged CEO Pay in FTSE 100 companies: Business Rates Relief (BRR)

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.202**	-0.018	-0.361**	-0.020	-0.097	-0.259***
2021/q2 – 2022/q1	0.079	0.328***	-0.024	0.019	-0.240 ⁺	-0.366***
Received Business Rate Relief (BRR)	-0.119	-0.279	-0.123	0.070	0.559	0.169
Received BRR * 20/q2	-0.014	0.350	-0.099	-0.014	0.503	0.027
Received BRR * 21/q2	0.136	0.212	-0.252	-0.014	-0.404	0.020
Change in CEO – Yes	-0.119	-0.305*	-0.229	0.028	0.491*	-0.084
Log turnover	0.219***	0.198***	0.152	0.111***	0.158	0.261***
Number of employees ('000s)	-0.001	-0.000	-0.000	0.001	0.000	-0.000
ROA	-0.001	0.005	-0.002	-0.004***	-0.015	-0.008
Tobin's Q	0.015	-0.007	0.021	0.019***	0.004	0.055*
Manufacture	0.305	0.491*	-0.272	0.238*	0.631	0.318
Construction	0.113	0.419	-0.268	0.064	0.298	0.288
Retail	0.188	0.343	0.044	0.027	-0.048	-0.040
Transport/storage	-0.478	-0.155	-0.910	-0.152	0.876	-0.100
Accommodation/food	0.049	0.669	-0.699	0.027	-0.401	0.411
Information/communication	0.167	0.423	-0.297	0.125	0.077	-0.072
Finance/insurance/real estate	0.158	0.568*	-0.218	0.381**	0.071	-0.306
Professional/science/technology	0.198	0.374	-0.384	0.039	-0.058	0.150
Services	0.583*	0.696*	0.270	0.131	0.052	0.173
Intercept	4.565***	3.386***	5.134***	4.908***	1.259	1.009
N	256	208	182	256	251	238

Notes: *** p < .001; ** p < .01; * p < .05; ⁺ p < .1

Table A4.4: Random-effects coefficients from Models of logged CEO Pay in FTSE 100 companies: Deferred Tax

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.161*	0.019	-0.317*	-0.016	-0.053	-0.260***
2021/q2 – 2022/q1	0.111	0.351***	0.000	0.018	-0.326*	-0.376***
Received Deferred tax	-0.121	-0.577	0.346	-0.123	-0.796	-0.525
Received Deferred tax * 20/q2	-0.582*	-0.015	-1.314+	-0.085	0.375	0.063
Received Deferred tax * 21/q2	-0.203	0.072	-0.960+	-0.008	0.392	0.181
Change in CEO – Yes	-0.164	-0.305*	-0.398	0.021	0.552**	-0.063
Log turnover	0.216***	0.193***	0.174+	0.109***	0.139	0.255***
Number of employees ('000s)	-0.000	0.000	-0.000	0.001	0.000	-0.000
ROA	-0.003	0.006	-0.007	-0.005***	-0.011	-0.007
Tobin's Q	0.023	-0.003	0.035	0.019***	0.001	0.055*
Manufacture	0.312	0.517*	-0.267	0.249*	0.682	0.352
Construction	0.099	0.395	-0.329	0.072	0.368	0.317
Retail	0.163	0.314	-0.026	0.069	0.302	0.097
Transport/storage	-0.494	-0.171	-0.924	-0.155	0.885	-0.109
Accommodation/food	0.183	0.841+	-1.023	0.157	0.329	0.782
Information/communication	0.225	0.466+	-0.263	0.168	0.197	-0.002
Finance/insurance/real estate	0.152	0.559*	-0.236	0.380**	0.071	-0.311
Professional/science/technology	0.175	0.352	-0.429	0.042	-0.013	0.165
Services	0.577*	0.693*	0.290	0.128	0.015	0.165
Intercept	4.589***	3.438***	4.820**	4.937***	1.547	1.103
N	256	208	182	256	251	238

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.5: Random-effects Coefficients from Models of logged CFO Pay in FTSE 100 companies: CCFF Loans

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.182*	-0.024	-0.356**	-0.017	-0.068	-0.271***
2021/q2 – 2022/q1	0.084	0.328***	-0.035	0.017	-0.388**	-0.374***
Received CCFF loans	-0.252	-0.515	-0.160	-0.054	-0.387	-0.077
Received CCFF loans * 20/q2	-0.291	0.737*	-0.507	-0.060	0.551	0.188
Received CCFF loans * 21/q2	0.162	0.400	-0.417	0.004	1.128*	0.106
Change in CFO – Yes	-0.142	-0.287*	-0.245	0.024	0.494*	-0.074
Log turnover	0.220***	0.198***	0.150	0.111***	0.154	0.266***
Number of employees ('000s)	-0.001	0.000	-0.000	0.001	0.000	-0.001
ROA	-0.002	0.005	-0.003	-0.004***	-0.013	-0.008
Tobin's Q	0.016	-0.006	0.022	0.019***	0.002	0.056*
Manufacture	0.332	0.497*	-0.238	0.250*	0.647	0.329
Construction	0.108	0.397	-0.329	0.075	0.391	0.324
Retail	0.164	0.274	-0.011	0.064	0.239	0.057
Transport/storage	-0.435	-0.023	-0.857	-0.135	0.839	-0.086
Accommodation/food	0.154	0.713	-0.593	0.114	-0.108	0.542
Information/communication	0.158	0.403	-0.328	0.132	0.130	-0.047
Finance/insurance/real estate	0.159	0.559*	-0.216	0.382**	0.092	-0.303
Professional/science/technology	0.187	0.358	-0.412	0.045	-0.006	0.174
Services	0.638*	0.723*	0.322	0.144	0.011	0.175
Intercept	4.526***	3.379***	5.183***	4.903***	1.347	0.944
N	256	208	182	256	251	238

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.6: Random-effects Coefficients from Models of logged CFO Remuneration in FTSE 100 Companies: International Wage Support

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.164 ⁺	0.039	-0.325 ⁺	-0.000	-0.212	-0.204 ^{**}
2021/q2 – 2022/q1	0.130	0.347 ^{***}	0.090	0.007	0.049	-0.412 ^{***}
Received intl. wage suprt	-0.391 [*]	-0.319	-0.463	-0.164 ⁺	-0.753 [*]	-0.632 ^{**}
Received intl. wage suprt * 20/q2	-0.315	-0.300	-0.444	-0.037	0.098	0.086
Received intl. wage suprt * 21/q2	0.082	0.054	-0.207	0.070	-0.141	0.294 ⁺
Change in CFO - Yes	0.090	0.023	0.110	-0.082 [*]	0.859 ^{***}	-0.169 ⁺
Log turnover	0.199 ^{***}	0.213 ^{***}	0.157 ⁺	0.141 ^{***}	0.198 [*]	0.197 ^{***}
Number of employees ('000s)	-0.001	-0.001	-0.001	0.000	0.002	0.000
ROA	-0.002	0.005	-0.006	-0.005 [*]	-0.010	0.001
Tobin's Q	0.018	0.001	0.043	0.020 [*]	-0.012	0.008
Manufacture	-0.016	0.096	-0.140	0.146	0.441	0.166
Construction	-0.045	0.115	0.080	0.077	0.985 ⁺	-0.022
Retail	0.017	0.098	0.202	-0.013	0.087	-0.138
Transport/storage	-0.639 ⁺	-0.346	-0.485	-0.117	-0.695	-0.377
Accommodation/food	0.246	0.707	-0.252	0.266	0.404	0.832
Information/communication	0.042	0.228	0.074	0.197	-0.004	-0.399
Finance/insurance/real estate	0.125	0.262	0.047	0.398 ^{**}	0.226	-0.246
Professional/science/technology	0.118	0.164	-0.006	0.100	0.245	-0.225
Services	0.449	0.482	0.385	0.230	0.474	-0.028
Intercept	4.464 ^{***}	2.876 ^{***}	4.247 ^{**}	4.020 ^{***}	0.037	1.730 ⁺
N	239	196	168	239	237	235

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.7: Random-effects coefficients from Models of logged CFO Pay in FTSE 100 Companies: Business Rates Relief (BRR)

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.222**	0.013	-0.391*	-0.015	-0.251	-0.213**
2021/q2 – 2022/q1	0.116	0.363***	0.025	0.006	0.018	-0.381***
Received Business Rate Relief (BRR)	-0.474 ⁺	-0.127	-0.425	-0.217 ⁺	-0.883 ⁺	-0.407
Received BRR * 20/q2	-0.102	0.031	0.020	0.056	0.434	0.202
Received BRR * 21/q2	0.280	-0.028	0.134	0.142	0.048	0.276
Change in CFO – Yes	0.089	-0.003	0.097	-0.079 ⁺	0.882***	-0.175 ⁺
Log turnover	0.195***	0.203***	0.154	0.141***	0.192*	0.190**
Number of employees ('000s)	-0.000	-0.001	-0.001	0.000	0.002	0.000
ROA	-0.001	0.005	-0.006	-0.005*	-0.012	0.001
Tobin's Q	0.011	-0.005	0.034	0.018*	-0.017	0.005
Manufacture	-0.021	0.084	-0.154	0.145	0.433	0.134
Construction	-0.204	-0.004	-0.372	0.028	0.728	-0.198
Retail	0.002	0.023	0.111	-0.014	0.071	-0.227
Transport/storage	-0.628	-0.405	-0.515	-0.106	-0.674	-0.438
Accommodation/food	0.182	0.520	-0.497	0.262	0.336	0.556
Information/communication	-0.088	0.139	-0.097	0.153	-0.190	-0.548
Finance/insurance/real estate	0.123	0.263	0.038	0.398**	0.225	-0.250
Professional/science/technology	0.028	0.068	-0.122	0.074	0.097	-0.344
Services	0.358	0.376	0.227	0.205	0.326	-0.164
Intercept	4.553***	3.045***	4.340**	4.024***	0.175	1.822 ⁺
N	239	196	168	239	237	235

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.8: Random-effects Coefficients from Models of logged CFO Pay in FTSE 100 companies: Deferred Tax

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.261**	-0.005	-0.410*	-0.019	-0.237	-0.211**
2021/q2 – 2022/q1	0.097	0.337***	-0.021	0.009	-0.012	-0.385***
Received Deferred tax	-0.265	-0.141	-0.417	-0.048	0.173	-0.116
Received Deferred tax * 20/q2	0.196	0.225	0.254	0.074	0.356	0.158
Received Deferred tax * 21/q2	0.388 ⁺	0.182	0.403	0.096	0.247	0.253
Change in CFO – Yes	0.090	-0.015	0.076	-0.083*	0.823***	-0.192*
Log turnover	0.186***	0.199***	0.151	0.137***	0.169 ⁺	0.181**
Number of employees ('000s)	-0.000	-0.001	-0.001	0.000	0.003	0.000
ROA	0.001	0.005	-0.005	-0.005*	-0.011	0.002
Tobin's Q	0.007	-0.005	0.033	0.017*	-0.017	0.003
Manufacture	-0.066	0.068	-0.187	0.127	0.317	0.104
Construction	-0.209	-0.002	-0.322	0.018	0.630	-0.220
Retail	-0.085	-0.010	0.103	-0.064	-0.361	-0.325
Transport/storage	-0.744 ⁺	-0.439	-0.689	-0.165	-0.891	-0.547
Accommodation/food	-0.189	0.433	-0.679	0.100	-0.735	0.279
Information/communication	-0.093	0.137	-0.091	0.147	-0.280	-0.562
Finance/insurance/real estate	0.116	0.262	0.029	0.395**	0.206	-0.256
Professional/science/technology	-0.010	0.058	-0.151	0.055	-0.031	-0.379
Services	0.270	0.349	0.160	0.172	0.162	-0.224
Intercept	4.716***	3.109***	4.416**	4.092***	0.546	1.973*
N	239	196	168	239	237	235

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

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Table A4.9: Random-effects Coefficients from Models of logged CFO Pay in FTSE 100 companies: CCFF loans

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.244**	0.003	-0.334*	-0.019	-0.246	-0.205**
2021/q2 – 2022/q1	0.128	0.332***	0.135	0.008	0.002	-0.348***
Received CCFF loans	-0.356	-0.160	0.040	-0.105	-0.416	-0.147
Received CCFF loans * 20/q2	0.092	0.284	-0.964	0.129	0.728	0.186
Received CCFF loans * 21/q2	0.280	0.385	-1.243*	0.197 ⁺	0.249	-0.020
Change in CFO – Yes	0.106	-0.012	0.038	-0.078 ⁺	0.839***	-0.183*
Log turnover	0.189***	0.201***	0.147	0.138***	0.178 ⁺	0.186**
Number of employees ('000s)	-0.000	-0.001	-0.001	0.001	0.003	0.000
ROA	0.000	0.005	-0.005	-0.005*	-0.011	0.001
Tobin's Q	0.008	-0.005	0.033	0.018*	-0.018	0.003
Manufacture	-0.042	0.059	-0.117	0.127	0.358	0.119
Construction	-0.210	-0.004	-0.388	0.023	0.702	-0.209
Retail	-0.102	-0.035	0.114	-0.061	-0.148	-0.300
Transport/storage	-0.667 ⁺	-0.398	-0.654	-0.138	-0.779	-0.502
Accommodation/food	-0.099	0.338	-0.362	0.101	-0.366	0.368
Information/communication	-0.096	0.135	-0.111	0.148	-0.223	-0.553
Finance/insurance/real estate	0.117	0.262	0.058	0.396**	0.215	-0.254
Professional/science/technology	-0.013	0.054	-0.161	0.057	0.015	-0.371
Services	0.318	0.342	0.250	0.174	0.193	-0.199
Intercept	4.644***	3.085***	4.404**	4.068***	0.397	1.889 ⁺
N	239	196	168	239	237	235

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.10: Random-effects Coefficients from Models of logged Shareholder Dividends in FTSE 100 Companies

	CJRS Grants	International Wage Support	Deferred tax	BRR	CCFF
2020/q2 – 2021/q1	-0.126	-0.114	-0.125	-0.164*	-0.111
2021/q2 – 2022/q1	-0.083	-0.109	-0.182*	-0.110	-0.148 ⁺
Received support	-0.886**	-0.993**	0.028	-0.448	-1.030*
Received support * 20/q2	0.389	0.087	0.218	0.879**	-0.150
Received support * 21/q2	-0.681**	-2.014***	0.421	-0.374	-0.635
Change in CEO	-0.077	-0.089	-0.078	-0.157	-0.046
Change in CFO	-0.131	-0.112	-0.180	-0.139	-0.169
Change in CEO/CFO	-0.027	0.042	0.047	0.004	0.035
Log turnover	0.515***	0.481***	0.461***	0.485***	0.463***
Number of employees ('000s)	0.001	0.001	0.002	0.001	0.002
ROA	0.063**	0.057**	0.062**	0.055**	0.062**
Tobin's Q	-0.038	-0.057	-0.081 ⁺	-0.060	-0.067 ⁺
EBITDA	0.000	0.000**	0.000 ⁺	0.000	0.000*
ROE	-6.592*	-6.138*	-5.949*	-5.643*	-6.289*
Manufacture	-0.432	-0.253	-0.465	-0.464	-0.275
Construction	0.217	-0.065	-0.154	-0.136	-0.111
Retail	-0.868*	-0.604	-1.171*	-0.980 ⁺	-1.073*
Transport/storage	-0.650	-0.538	-0.869	-0.908	-0.566
Accommodation/food	0.127	0.397	-0.778	-0.387	-0.038
Information/communication	-0.313	-0.442	-0.534	-0.491	-0.497
Finance/insurance/real estate	0.184	0.233	0.193	0.175	0.201
Professional/science/technology	-0.632	-0.731*	-0.893*	-0.872*	-0.867*
Services	0.219	0.086	-0.137	-0.164	0.124
Intercept	5.108***	5.546***	5.931***	5.611***	5.837***
N	215	215	215	215	215

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

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Table A4.11: Random-effects Coefficients from Models of logged CEO Pay in FTSE 250 companies: CJRS Grants

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.035	0.108	-0.074	0.024	-0.152	-0.072
2021/q2 – 2022/q1	0.206**	0.204 ⁺	0.104	0.048*	-0.112	-0.136*
Received CJRS grants	-0.006	-0.328*	0.176	-0.002	0.236	0.134
Received CJRS grants * 20/q2	-0.268*	-0.256	-0.209	-0.085*	0.044	-0.081
Received CJRS grants * 21/q2	-0.110	0.350*	0.094	-0.018	-0.166	-0.085
Change in CEO - Yes	0.036	-0.268*	-0.329	-0.017	0.838***	0.011
Log turnover	0.110**	0.138**	-0.026	0.076***	0.001	0.205***
Number of employees ('000s)	-0.004	0.006	-0.008	0.002	-0.000	0.004
ROA	0.015***	0.013*	0.028**	-0.000	0.004	-0.002
Tobin's Q	-0.081**	-0.027	-0.161**	-0.031**	-0.122*	-0.088*
Manufacture	0.123	0.095	0.422	0.036	-0.337	0.349
Construction	0.116	-0.086	0.247	0.023	-0.686	0.272
Retail	0.203	0.224	0.725 ⁺	0.087	-0.323	-0.035
Transport/storage	0.203	0.473	0.314	-0.052	-1.666**	-0.311
Accommodation/food	-0.100	-0.060	0.046	0.016	-0.811	0.057
Information/communication	0.407*	0.442	1.310**	0.029	-0.720 ⁺	-0.379
Finance/insurance/real estate	0.069	0.369	0.212	-0.057	-1.190**	-0.356
Professional/science/technology	0.235	0.209	0.534	-0.078	-0.540	-0.416
Services	0.246	0.224	0.539	0.092	-0.277	0.202
Intercept	5.706***	4.094***	6.157***	5.273***	3.901***	1.453 ⁺
N	387	303	242	387	384	361

Notes: *** p < .001; ** p < .01; * p < .05; ⁺ p < .1

Table A4.12: Random-effects Coefficients from Models of logged CEO Pay in FTSE 250 Companies: International Wage Support

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.118 ⁺	0.021	-0.090	-0.001	-0.152	-0.096 ⁺
2021/q2 – 2022/q1	0.178 ^{**}	0.298 ^{**}	0.182	0.041 [*]	-0.117	-0.191 ^{***}
Received intl. wage suprt	-0.001	-0.222	0.081	-0.025	0.391	-0.208
Received intl. wage suprt * 20/q2	-0.154	0.231	-0.367	-0.050	0.050	-0.045
Received intl. wage suprt * 21/q2	-0.098	0.301	-0.234	-0.005	-0.290	0.059
Change in CEO - Yes	0.030	-0.265 [*]	-0.321	-0.020	0.864 ^{***}	0.006
Log turnover	0.106 ^{**}	0.124 [*]	-0.004	0.077 ^{***}	-0.003	0.217 ^{***}
Number of employees ('000s)	-0.004	0.005	-0.007	0.002	-0.001	0.007
ROA	0.016 ^{***}	0.013 [*]	0.028 ^{**}	0.000	0.003	-0.002
Tobin's Q	-0.082 ^{**}	-0.026	-0.158 ^{**}	-0.031 [*]	-0.128 [*]	-0.085 [*]
Manufacture	0.101	-0.016	0.528	0.037	-0.361	0.447
Construction	0.079	-0.185	0.317	0.015	-0.649	0.324
Retail	0.151	0.086	0.799 [*]	0.074	-0.275	0.014
Transport/storage	0.200	0.446	0.382	-0.042	-1.741 ^{***}	-0.204
Accommodation/food	-0.107	-0.093	0.146	0.027	-0.905	0.216
Information/communication	0.379 ⁺	0.295	1.417 ^{***}	0.028	-0.729 ⁺	-0.273
Finance/insurance/real estate	0.075	0.338	0.244	-0.052	-1.221 ^{***}	-0.325
Professional/science/technology	0.213	0.140	0.592	-0.081	-0.529	-0.368
Services	0.213	0.139	0.592	0.084	-0.239	0.257
Intercept	5.775 ^{***}	4.288 ^{***}	5.825 ^{***}	5.263 ^{***}	3.994 ^{***}	1.302
N	387	303	242	387	384	361

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.13: Random-effects Coefficients from Models of logged CEO Remuneration in FTSE 250 Companies: Business Rates Relief (BRR)

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.120 ⁺	0.076	-0.073	-0.010	-0.151	-0.104 [*]
2021/q2 – 2022/q1	0.166 ^{**}	0.361 ^{***}	0.167	0.039 [*]	-0.177 ⁺	-0.175 ^{***}
Received Business Rate Relief (BRR)	0.035	0.012	0.345	-0.092	0.089	0.164
Received BRR * 20/q2	-0.294 ⁺	-0.140	-0.870 ⁺	-0.028	0.142	-0.046
Received BRR * 21/q2	-0.094	0.074	-0.196	0.002	-0.085	-0.022
Change in CEO - Yes	0.034	-0.241 ⁺	-0.269	-0.018	0.834 ^{***}	0.014
Log turnover	0.102 ^{**}	0.120 [*]	-0.008	0.077 ^{***}	0.016	0.208 ^{***}
Number of employees ('000s)	-0.004	0.004	-0.010	0.002	0.000	0.005
ROA	0.016 ^{***}	0.013 [*]	0.028 ^{**}	0.000	0.003	-0.002
Tobin's Q	-0.087 ^{***}	-0.026	-0.158 ^{**}	-0.033 ^{**}	-0.121 [*]	-0.084 [*]
Manufacture	0.080	-0.029	0.492	0.029	-0.264	0.367
Construction	0.070	-0.183	0.309	0.012	-0.618	0.297
Retail	0.196	0.075	0.778 ⁺	0.125	-0.298	-0.087
Transport/storage	0.156	0.409	0.456	-0.068	-1.586 ^{**}	-0.288
Accommodation/food	-0.072	-0.206	0.111	0.096	-0.815	-0.048
Information/communication	0.363 ⁺	0.276	1.373 ^{**}	0.026	-0.638	-0.361
Finance/insurance/real estate	0.063	0.338	0.229	-0.057	-1.182 ^{**}	-0.355
Professional/science/technology	0.205	0.138	0.603	-0.082	-0.493	-0.411
Services	0.210	0.149	0.595	0.086	-0.214	0.216
Intercept	5.833 ^{***}	4.301 ^{***}	5.890 ^{***}	5.268 ^{***}	3.743 ^{***}	1.440 ⁺
N	387	303	242	387	384	361

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.14: Random-effects Coefficients from Models of logged CEO Pay in FTSE 250 companies: Deferred Tax

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.111 ⁺	0.118	-0.103	-0.011	-0.114	-0.090 ⁺
2021/q2 – 2022/q1	0.157 [*]	0.360 ^{***}	0.163	0.040 [*]	-0.177 ⁺	-0.159 ^{**}
Received Deferred tax	0.050	0.041	0.213	-0.122 ⁺	0.156	-0.105
Received Deferred tax * 20/q2	-0.293 ⁺	-0.523 ⁺	-0.334	-0.016	-0.130	-0.133
Received Deferred tax * 21/q2	-0.011	0.072	-0.153	-0.003	-0.067	-0.109
Change in CEO - Yes	0.043	-0.230 ⁺	-0.305	-0.017	0.843 ^{***}	0.014
Log turnover	0.105 ^{**}	0.121 [*]	-0.012	0.081 ^{***}	0.012	0.211 ^{***}
Number of employees ('000s)	-0.004	0.004	-0.008	0.002	0.001	0.006
ROA	0.016 ^{***}	0.013 [*]	0.028 ^{**}	0.000	0.003	-0.002
Tobin's Q	-0.084 ^{***}	-0.026	-0.155 ^{**}	-0.033 ^{**}	-0.122 [*]	-0.094 [*]
Manufacture	0.085	-0.029	0.474	0.050	-0.278	0.421
Construction	0.080	-0.176	0.294	0.037	-0.636	0.343
Retail	0.151	0.096	0.775 ⁺	0.114	-0.268	0.082
Transport/storage	0.155	0.407	0.409	-0.071	-1.588 ^{**}	-0.298
Accommodation/food	-0.155	-0.222	0.135	0.025	-0.735	0.134
Information/communication	0.361 ⁺	0.281	1.365 ^{**}	0.041	-0.645	-0.299
Finance/insurance/real estate	0.066	0.345	0.227	-0.049	-1.190 ^{**}	-0.341
Professional/science/technology	0.200	0.135	0.585	-0.081	-0.493	-0.383
Services	0.206	0.142	0.571	0.096	-0.218	0.259
Intercept	5.793 ^{***}	4.264 ^{***}	5.956 ^{***}	5.218 ^{***}	3.792 ^{***}	1.383
N	387	303	242	387	384	361

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.15: Random-effects Coefficients from Models of logged CEO Pay in FTSE 250 companies: CCFF loans

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.125*	0.071	-0.146	-0.009	-0.123	-0.110*
2021/q2 – 2022/q1	0.171**	0.351***	0.133	0.041*	-0.172+	-0.152**
Received CCFF loans	-0.055	-0.347	0.034	-0.002	-0.169	0.228
Received CCFF loans * 20/q2	-0.445*	-0.501	-0.312	-0.066	-0.150	-0.028
Received CCFF loans * 21/q2	-0.202	0.318	0.105	-0.021	-0.204	-0.368*
Change in CEO - Yes	0.041	-0.252+	-0.330	-0.017	0.843***	0.012
Log turnover	0.105**	0.125*	-0.009	0.076***	0.019	0.213***
Number of employees ('000s)	-0.003	0.005	-0.008	0.002	0.002	0.002
ROA	0.016***	0.013*	0.028**	0.000	0.003	-0.002
Tobin's Q	-0.082**	-0.026	-0.156**	-0.031*	-0.123*	-0.090*
Manufacture	0.103	0.001	0.487	0.026	-0.226	0.372
Construction	0.073	-0.184	0.300	0.011	-0.614	0.297
Retail	0.156	0.087	0.795+	0.068	-0.205	0.010
Transport/storage	0.287	0.527	0.387	-0.049	-1.442*	-0.282
Accommodation/food	-0.124	-0.144	0.150	0.004	-0.665	0.123
Information/communication	0.348+	0.279	1.386**	0.014	-0.626	-0.336
Finance/insurance/real estate	0.065	0.336	0.229	-0.057	-1.182**	-0.355
Professional/science/technology	0.184	0.132	0.579	-0.090	-0.498	-0.369
Services	0.189	0.139	0.573	0.077	-0.214	0.255
Intercept	5.794***	4.230***	5.934***	5.279***	3.688**	1.382
N	387	303	242	387	384	361

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.16: Random-effects Coefficients from Models of logged CFO Pay in FTSE 250 companies: CJRS Grants

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	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.065	0.023	-0.091	0.004	-0.466**	-0.154*
2021/q2 – 2022/q1	0.132 ⁺	0.108	0.033	0.046	-0.394*	-0.191**
Received CJRS grants	0.014	-0.297 ⁺	0.008	-0.029	-0.301	0.224
Received CJRS grants * 20/q2	-0.120	-0.111	-0.093	0.055	0.611*	0.094
Received CJRS grants * 21/q2	-0.028	0.469**	-0.026	0.064	0.340	0.000
Change in CFO - Yes	-0.033	-0.310*	-0.135	0.019	0.602***	0.014
Log turnover	0.150***	0.149*	0.087	0.097***	0.095	0.142*
Number of employees ('000s)	-0.005	0.004	-0.005	0.000	-0.003	-0.005
ROA	0.016***	0.016*	0.045***	0.001	0.007	0.001
Tobin's Q	-0.031	-0.012	-0.117 ⁺	-0.020	-0.057	-0.083*
Manufacture	-0.116	-0.159	-0.034	-0.085	-0.387	-0.025
Construction	-0.003	-0.323	-0.063	-0.040	-0.374	-0.155
Retail	-0.025	-0.102	0.476	0.028	-0.128	-0.181
Transport/storage	0.216	0.215	0.130	0.062	-1.156*	0.023
Accommodation/food	-0.370	-0.833 ⁺	-0.393	-0.151	-0.712	-0.193
Information/communication	0.308	0.148	0.865	0.099	-0.836 ⁺	-0.428
Finance/insurance/real estate	0.003	0.170	-0.293	-0.055	-0.804*	-0.521
Professional/science/technology	-0.007	-0.079	-0.089	-0.144	-0.484	-0.570
Services	-0.024	0.007	-0.056	0.006	-0.937*	-0.100
Intercept	4.690***	3.587***	4.356**	4.560***	2.376*	2.011*
N	378	291	202	378	367	365

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.17: Random-effects Coefficients from Models of logged CFO Pay in FTSE 250 Companies: International Wage Support

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.086	-0.021	-0.003	0.022	-0.375**	-0.127*
2021/q2 – 2022/q1	0.132*	0.267**	0.165	0.072 ⁺	-0.305*	-0.243***
Received intl. wage support	-0.002	-0.146	-0.042	-0.038	-0.377	-0.124
Received intl. wage support * 20/q2	-0.136	0.238	-0.680*	0.027	0.777**	0.087
Received intl. wage support * 21/q2	-0.055	0.287	-0.676*	0.022	0.326	0.212 ⁺
Change in CFO - Yes	-0.048	-0.288*	-0.181	0.024	0.680***	0.030
Log turnover	0.151***	0.134*	0.105	0.097***	0.094	0.153*
Number of employees ('000s)	-0.004	0.003	-0.000	0.000	-0.003	-0.002
ROA	0.017***	0.015*	0.044***	0.000	0.004	0.001
Tobin's Q	-0.032	-0.011	-0.115 ⁺	-0.018	-0.047	-0.083*
Manufacture	-0.108	-0.240	0.068	-0.073	-0.372	0.064
Construction	-0.009	-0.386	0.006	-0.032	-0.349	-0.082
Retail	-0.030	-0.172	0.498	0.040	-0.113	-0.081
Transport/storage	0.237	0.220	0.262	0.079	-1.108*	0.068
Accommodation/food	-0.344	-0.856 ⁺	-0.293	-0.130	-0.693	-0.091
Information/communication	0.317	0.042	0.959 ⁺	0.111	-0.844 ⁺	-0.320
Finance/insurance/real estate	0.010	0.153	-0.211	-0.051	-0.793*	-0.531
Professional/science/technology	-0.004	-0.103	-0.050	-0.136	-0.470	-0.541
Services	-0.026	-0.031	-0.018	0.014	-0.927*	-0.029
Intercept	4.682***	3.755***	4.000**	4.536***	2.318 ⁺	1.909 ⁺
N	378	291	202	378	367	365

Notes: *** p < .001; ** p < .01; * p < .05; ⁺ p < .1

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Table A4.18: Random-effects coefficients from Models of logged CFO Pay in FTSE 250 Companies: Business Rates Relief (BRR)

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.106 ⁺	0.028	-0.120	0.025	-0.220	-0.106 ⁺
2021/q2 – 2022/q1	0.098	0.301 ^{**}	-0.001	0.056	-0.225 ⁺	-0.212 ^{***}
Received Business Rate Relief (BRR)	-0.002	-0.006	-0.113	-0.142	-0.121	0.091
Received BRR * 20/q2	-0.088	-0.108	-0.181	0.042	0.252	-0.000
Received BRR * 21/q2	0.154	0.333	0.174	0.160	0.000	0.163
Change in CFO - Yes	-0.037	-0.288 [*]	-0.130	0.026	0.643 ^{***}	0.028
Log turnover	0.152 ^{***}	0.136 [*]	0.092	0.098 ^{***}	0.087	0.153 [*]
Number of employees ('000s)	-0.005	0.002	-0.006	0.000	-0.004	-0.004
ROA	0.017 ^{***}	0.015 [*]	0.045 ^{***}	0.000	0.004	0.001
Tobin's Q	-0.031	-0.007	-0.118 ⁺	-0.020	-0.056	-0.078 ⁺
Manufacture	-0.131	-0.240	-0.057	-0.077	-0.370	0.046
Construction	-0.018	-0.380	-0.086	-0.034	-0.353	-0.085
Retail	-0.063	-0.252	0.489	0.073	-0.076	-0.163
Transport/storage	0.202	0.234	0.114	0.059	-1.129 [*]	0.091
Accommodation/food	-0.407	-0.921 ⁺	-0.251	-0.076	-0.653	-0.227
Information/communication	0.292	0.032	0.847	0.111	-0.822 ⁺	-0.344
Finance/insurance/real estate	0.001	0.159	-0.314	-0.054	-0.795 [*]	-0.532
Professional/science/technology	-0.021	-0.106	-0.098	-0.140	-0.456	-0.539
Services	-0.041	-0.026	-0.078	0.013	-0.910 [*]	-0.034
Intercept	4.674 ^{***}	3.694 ^{***}	4.324 ^{**}	4.522 ^{***}	2.353 [*]	1.899 ⁺
N	378	291	202	378	367	365

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

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Table A4.19: Random-effects Coefficients from Models of logged CFO Pay in FTSE 250 Companies: Deferred Tax

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.090	0.064	-0.124	0.013	-0.225	-0.119*
2021/q2 – 2022/q1	0.095	0.292**	-0.035	0.054	-0.233+	-0.207***
Received Deferred tax	0.146	0.003	0.167	-0.159+	-0.175	0.072
Received Deferred tax * 20/q2	-0.172	-0.436	-0.050	0.106	0.228	0.072
Received Deferred tax * 21/q2	0.151	0.284	0.313	0.148	0.032	0.108
Change in CFO - Yes	-0.047	-0.317*	-0.153	0.029	0.650***	0.024
Log turnover	0.146***	0.138*	0.077	0.101***	0.090	0.147*
Number of employees ('000s)	-0.005	0.003	-0.007	0.000	-0.003	-0.004
ROA	0.017***	0.016*	0.047***	0.000	0.004	0.001
Tobin's Q	-0.030	-0.009	-0.115+	-0.020	-0.057	-0.079+
Manufacture	-0.160	-0.250	-0.125	-0.064	-0.352	0.025
Construction	-0.050	-0.379	-0.151	-0.019	-0.332	-0.113
Retail	-0.106	-0.200	0.314	0.062	-0.056	-0.124
Transport/storage	0.208	0.210	0.133	0.062	-1.135*	0.093
Accommodation/food	-0.418	-0.964*	-0.407	-0.130	-0.672	-0.113
Information/communication	0.262	0.031	0.777	0.120	-0.804+	-0.357
Finance/insurance/real estate	-0.011	0.160	-0.328	-0.049	-0.788*	-0.542
Professional/science/technology	-0.025	-0.121	-0.098	-0.140	-0.455	-0.534
Services	-0.061	-0.046	-0.127	0.019	-0.899*	-0.041
Intercept	4.765***	3.667***	4.549**	4.492***	2.312*	1.992*
N	378	291	202	378	367	365

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.20: Random-effects Coefficients from Models of logged CFO Pay in FTSE 250 Companies: CCFF loans

	Single Figure	Bonuses	LTIP	Basic Salary	Benefits/ other	Pension
2020/q2 – 2021/q1	-0.083	0.049	-0.096	0.027	-0.035	-0.117*
2021/q2 – 2022/q1	0.110 ⁺	0.292 ^{**}	-0.016	0.069 ⁺	-0.074	-0.195 ^{***}
Received CCFF loans	0.208	0.086	0.180	-0.078	0.010	0.165
Received CCFF loans * 20/q2	-0.229	-0.454	-0.068	0.046	-0.230	0.045
Received CCFF loans * 21/q2	0.099	0.251	0.327	0.082	-0.261	0.040
Change in CFO - Yes	-0.045	-0.319 [*]	-0.165	0.035	-0.087	0.050
Log turnover	0.162 ^{***}	0.146 [*]	0.065	0.094 ^{**}	0.086	0.125 ⁺
Number of employees ('000s)	-0.006	0.000	-0.007	0.000	0.002	-0.004
ROA	0.018 ^{***}	0.016 [*]	0.046 ^{***}	0.001	0.002	0.001
Tobin's Q	-0.029	-0.008	-0.120 [*]	-0.020	-0.050	-0.084 ⁺
Manufacture	-0.263	-0.225	-0.142	-0.083	-0.578	-0.030
Construction	-0.145	-0.371	-0.141	-0.028	-0.465	-0.161
Retail	-0.197	-0.224	0.384	0.047	-0.187	-0.137
Transport/storage	0.127	0.276	0.151	0.065	-1.400 ^{**}	0.069
Accommodation/food	-0.507	-0.908 ⁺	-0.385	-0.137	-0.790	-0.154
Information/communication	0.171	0.050	0.793	0.110	-0.991 [*]	-0.402
Finance/insurance/real estate	-0.101	0.179	-0.310	-0.053	-1.349 ^{***}	-0.588
Professional/science/technology	-0.161	-0.107	-0.009	-0.164	-0.796 ⁺	-0.628
Services	-0.145	-0.008	-0.078	0.012	-0.928 [*]	-0.060
Intercept	4.634 ^{***}	3.552 ^{***}	4.681 ^{**}	4.570 ^{***}	2.267 [*]	2.322 [*]
N	373	289	202	373	361	360

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

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Table A4.21: Random-effects Coefficients from Models of logged Shareholder Dividends in FTSE 250 Companies

	Furlough	Intl. furlough	Deferred tax	BRR	CCFF
2020/q2 – 2021/q1	-0.169 ⁺	-0.247 ^{**}	-0.226 ^{**}	-0.290 ^{***}	-0.259 ^{***}
2021/q2 – 2022/q1	-0.068	-0.166 [*]	-0.175 [*]	-0.185 [*]	-0.174 [*]
Received support	-0.168	-0.158	-0.042	0.549	0.489
Received support * 20/q2	-0.281 ⁺	-0.144	-0.432 [*]	0.255	-0.562
Received support * 21/q2	-0.290 [*]	-0.136	-0.057	-0.125	-0.260
Change in CEO	0.157	0.167	0.184	0.182	0.163
Change in CFO	0.061	0.031	0.024	0.054	0.042
Change in CEO/CFO	-0.271	-0.264	-0.259	-0.286	-0.257
Log turnover	0.333 ^{**}	0.322 ^{**}	0.304 ^{**}	0.325 ^{**}	0.323 ^{**}
Number of employees ('000s)	0.001	0.000	-0.000	-0.003	-0.003
ROA	0.015	0.021	0.008	0.045	0.023
Tobin's Q	0.072	0.057	0.046	0.066	0.052
EBITDA	0.000 ⁺	0.000 ⁺	0.000 [*]	0.000 ⁺	0.000
ROE	-0.667	-0.931	0.472	-3.615	-1.158
Manufacture	-1.351 ^{**}	-1.423 ^{**}	-1.446 ^{**}	-1.572 ^{***}	-1.567 ^{***}
Construction	-0.599	-0.717	-0.696	-0.779	-0.762
Retail	-0.935 ⁺	-1.087 [*]	-1.004 [*]	-1.471 ^{**}	-1.160 [*]
Transport/storage	-0.342	-0.351	-0.444	-0.424	-0.590
Accommodation/food	-1.102	-1.124	-1.161	-1.914 [*]	-1.307 ⁺
Information/communication	-1.197 [*]	-1.280 [*]	-1.297 [*]	-1.474 ^{**}	-1.377 ^{**}
Finance/insurance/real estate	-0.958 [*]	-0.969 [*]	-0.984 [*]	-1.016 [*]	-1.016 [*]
Professional/science/technology	-1.155 [*]	-1.231 [*]	-1.212 [*]	-1.323 [*]	-1.256 [*]
Services	-1.152 [*]	-1.246 [*]	-1.203 [*]	-1.365 ^{**}	-1.276 [*]
Intercept	6.878 ^{***}	7.063 ^{***}	7.295 ^{***}	7.074 ^{***}	7.109 ^{***}
N	276	276	276	276	276

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A4.22: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID support on Total Pay: CEOs and CFOs in FTSE 100 and FTSE 250 Companies

Support type	FTSE-100			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.08	0.14	0.16	0.19
International Wage Support	-0.17	0.20	0.35	0.27
Business rates relief	0.19	0.20	0.46*	0.21
Deferred tax	-0.06	0.18	-0.05	0.40
CCFF	0.32	0.21	0.31	0.32
Support type	FTSE-250			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.04	0.10	-0.02	0.13
International Wage Support	0.02	0.10	-0.06	0.15
Business rates relief	0.16	0.15	0.25	0.16
Deferred tax	0.11	0.10	0.22	0.13
CCFF	-0.08	0.21	0.19	0.19

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for a change in CEO/CFO, turnover, number of employees, return on assets (ROA), and Tobin's Q; *** p < .001; ** p < .01; * p < .05

Table A4.23: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID support on Bonuses: CEOs and CFOs in FTSE 100 and FTSE 250 Companies

Support type	FTSE-100			
	CEO		CFO	
	b	se	b	se
CJRS Grants	0.20	0.15	0.19	0.14
International Wage Support	0.08	0.19	0.07	0.16
Business rates relief	0.30	0.19	0.25	0.23
Deferred tax	0.12	0.29	0.06	0.41
CCFF	0.55**	0.17	0.44**	0.14
Support type	FTSE-250			
	CEO		CFO	
	b	se	b	se
CJRS Grants	0.38*	0.19	0.49*	0.20
International Wage Support	0.29	0.20	0.20	0.23
Business rates relief	0.22	0.27	0.44	0.27
Deferred tax	0.31	0.25	0.51 ⁺	0.27
CCFF	0.42	0.64	0.64	0.41

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for a change in CEO/CFO, turnover, number of employees, return on assets (ROA), and Tobin's Q; *** p < .001; ** p < .01; * p < .05

Table A4.24: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID support on LTIP: CEOs and CFOs in FTSE 100 and FTSE 250 Companies

Support type	FTSE-100			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.49	0.34	-0.32	0.53
International Wage Support	-0.12	0.51	-0.02	0.53
Business rates relief	-0.23	0.27	0.41	0.47
Deferred tax	-1.50**	0.51	-2.11*	0.94
CCFF	-0.35	0.60	-	-
Support type	FTSE-250			
	CEO		CFO	
	b	se	b	se
CJRS Grants	0.23	0.29	0.13	0.37
International Wage Support	0.13	0.44	-0.40	0.50
Business rates relief	-0.60*	0.34	-0.27	0.37
Deferred tax	0.02	0.27	0.28	0.26
CCFF	-0.37	0.38	-	-

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for a change in CEO/CFO, turnover, number of employees, return on assets (ROA), and Tobin's Q; *** p < .001; ** p < .01; * p < .05

Table A4.25: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID Support on Base Salary: CEOs and CFOs in FTSE 100 and FTSE 250 Companies

Support type	FTSE-100			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.02	0.02	0.08	0.07
International Wage Support	-0.04	0.03	0.15	0.10
Business rates relief	-0.02	0.03	0.11	0.09
Deferred tax	-0.06	0.04	0.12	0.16
CCFF	-0.05	0.05	0.20	0.13
Support type	FTSE-250			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.02	0.04	0.04	0.07
International Wage Support	-0.01	0.04	-0.02	0.07
Business rates relief	0.01	0.04	0.14	0.09
Deferred tax	0.00	0.03	0.14	0.08
CCFF	-0.03	0.03	0.08	0.07

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for a change in CEO/CFO, annual turnover, number of employees, return on assets (ROA), and Tobin's Q; *** p < .001; ** p < .01; * p < .05

Table A4.26: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID Support on Benefits and other Payments: CEOs and CFOs in FTSE 100 and FTSE 250 Companies

Support type	FTSE-100			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.54	0.47	0.01	0.39
International Wage Support	-0.84	0.75	0.01	0.44
Business rates relief	-0.35	0.70	0.36	0.34
Deferred tax	0.38	0.36	1.53*	0.67
CCFF	0.85	0.48	0.07	0.58
Support type	FTSE-250			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.11	0.21	0.23	0.31
International Wage Support	-0.20	0.25	0.24	0.26
Business rates relief	0.18	0.32	0.08	0.37
Deferred tax	0.05	0.28	0.01	0.34
CCFF	-0.34	0.29	0.37	0.39

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for a change in CEO/CFO, turnover, number of employees, return on assets (ROA), and Tobin's Q; *** p < .001; ** p < .01; * p < .05

Table A4.27: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID Support on Pensions: CEOs and CFOs in FTSE 100 and FTSE 250 Companies

Support type	FTSE-100			
	CEO		CFO	
	b	se	b	se
CJRS Grants	0.35**	0.12	0.29 ⁺	0.15
International Wage Support	0.25	0.14	0.33*	0.14
Business rates relief	0.04	0.19	0.32*	0.13
Deferred tax	0.24	0.22	0.23	0.25
CCFF	0.14	0.15	0.00	0.29
Support type	FTSE-250			
	CEO		CFO	
	b	se	b	se
CJRS Grants	-0.07	0.10	-0.05	0.12
International Wage Support	0.11	0.12	0.17	0.10
Business rates relief	-0.01	0.11	0.08	0.16
Deferred tax	-0.03	0.12	0.09	0.12
CCFF	-0.37	0.31	0.15	0.15

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for a change in CEO/CFO, turnover, number of employees, return on assets (ROA), and Tobin's Q; *** p < .001; ** p < .01; * p < .05

Table A4.28: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID Support on Dividend Payments: FTSE 100 and FTSE 250 Companies

Support type	FTSE-100		FTSE-250	
	b	se	b	se
CJRS Grants	-0.61*	0.30	-0.30*	0.15
International Wage Support	-1.07 ⁺	0.56	-0.12	0.16
Business rates relief	-0.48	0.41	-0.02	0.27

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for turnover, number of employees, return on assets (ROA), Tobin's Q, EBITDA, and return on equity (ROE); *** p < .001; ** p < .01; * p < .05

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	Median	£24,600	£25,545	£29,392	£30,947	£32,101	£34,430	£40,975	£53,437	£47,322
	Std. Dev.	4666	6326	11087	13269	13599	18711	28291	25461	31143
	N	7	9	8	7	9	8	7	9	8
Accommodation & Food	Mean	£16,665	£16,590	£18,954	£22,816	£22,658	£26,671	£34,639	£31,401	£35,741
	Median	£16,931	£16,736	£19,540	£23,098	£21,000	£23,000	£32,646	£27,333	£26,000
	Std. Dev.	2046	1631	1970	7212	6937	11230	20085	15510	21625
	N	4	7	7	4	7	7	4	7	7
Information and Communication	Mean	£30,854	£33,231	£34,481	£44,005	£46,851	£49,212	£66,259	£70,946	£75,021
	Median	£31,368	£34,004	£35,815	£46,532	£46,742	£49,370	£66,527	£73,558	£72,911
	Std. Dev.	8166	7917	9198	12561	12753	14639	23344	22777	28081
	N	18	20	20	18	20	20	18	20	20
Finance & Insurance Activities	Mean	£39,960	£39,432	£41,041	£60,918	£59,810	£64,142	£100,164	£98,112	£107,576
	Median	£30,945	£31,948	£33,200	£49,277	£51,440	£54,704	£83,594	£88,988	£91,520
	Std. Dev.	19896	17913	19019	31497	29202	31193	55616	51067	56462
	N	28	34	34	28	34	34	28	34	34
Real Estate Activities	Mean	£24,123	£20,672	£24,389	£32,698	£28,301	£29,839	£53,512	£46,031	£47,580
	Median	£24,123	£20,672	£24,389	£32,698	£28,301	£29,839	£53,512	£46,031	£47,580
	Std. Dev.	4954	747	16	11715	5233	6419	28359	19843	20901
	N	2	2	2	2	2	2	2	2	2
Professional, Scientific, & Technical Activities	Mean	£27,817	£28,639	£30,595	£37,081	£39,639	£41,103	£55,328	£56,562	£60,558
	Median	£26,512	£26,977	£28,026	£36,000	£37,336	£36,858	£50,064	£51,881	£54,871
	Std. Dev.	8970	9418	10613	16187	16509	18755	29969	27729	32980
	N	17	20	20	17	20	20	17	20	20
Administrative and Support Services Activities	Mean	£25,703	£25,359	£25,387	£35,620	£34,307	£35,262	£52,613	£52,100	£53,590
	Median	£23,379	£23,275	£22,823	£28,907	£34,775	£28,765	£41,775	£44,483	£46,996
	Std. Dev.	7246	6244	6926	12603	11658	12295	22681	20599	22074
	N	8	11	11	8	11	11	8	11	11

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Public Administration & Defence; Compulsory Social Security	Mean	£31,630	£32,330	£33,802	£44,912	£45,158	£47,541	£63,636	£63,196	£69,452
	Median	£29,549	£31,806	£33,046	£43,151	£44,146	£43,793	£59,500	£60,963	£61,195
	Std. Dev.	3189	2767	3529	6528	4823	6997	14899	9566	19883
	N	5	5	5	5	5	5	5	5	5
Human Health and Social Work Activities	Mean	£20,065	£19,863	£19,859	£28,487	£25,189	£23,759	£40,461	£32,476	£36,011
	Median	£20,065	£19,863	£19,859	£28,487	£25,189	£23,759	£40,461	£32,476	£36,011
	Std. Dev.	.	928	812	.	3825	325	.	10610	12010
	N	1	2	2	1	2	2	1	2	2
Arts, Entertainment & Recreation	Mean	£36,335	£30,777	£33,494	£46,518	£37,299	£40,713	£60,818	£49,188	£44,483
	Median	£36,335	£18,667	£18,910	£46,518	£20,808	£21,028	£60,818	£26,429	£26,330
	Std. Dev.	26766	22214	25614	35918	31183	35436	45670	42460	32814
	N	2	3	3	2	3	3	2	3	3
Other Service Activities	Mean	£30,652	£33,425	£32,663	£40,601	£42,641	£41,964	£65,922	£69,668	£71,619
	Median	£30,652	£33,425	£32,663	£40,601	£42,641	£41,964	£65,922	£69,668	£71,619
	Std. Dev.
	N	1	1	1	1	1	1	1	1	1

Source: Company annual reports and accounts, 2019-2022.

Table A5.2: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 100 Companies: CJRS Grants

	Model 1			Model 2		
	Lower quartile	Median	Upper quartile	Lower quartile	Median	Upper quartile
2020/q2 – 2021/q1	-25.0*	-14.3*	-10.0 ⁺	-24.5*	-13.9*	-9.7 ⁺
2021/q2 – 2022/q1	-2.9	0.1	0.1	-2.3	0.6	0.6
Received CJRS grants	11.5	23.7	24.8 ⁺	-5.4	9.1	9.3
Received CJRS grants * 2020/q2	-28.4	-34.0*	-28.5*	-29.2	-30.3 ⁺	-21.3 ⁺
Received CJRS grants * 2021/q2	1.9	-9.9	-8.2	1.6	-3.1	3.5
Change in CEO - Yes	-22.7 ⁺	-16.0 ⁺	-12.8 ⁺	-22.7 ⁺	-16.1 ⁺	-12.8*
Option B	5.1	13.8	16.6	-7.4	4.4	9.1
Option C	18.2	15.0	21.4	24.3	21.5	28.1 ⁺
Log turnover	26.1***	14.2**	7.7*	26.5***	14.5**	7.9*
Number of employees ('000s)	-0.1	-0.0	0.0	-0.1	0.0	0.1
ROA	-0.5	-0.3	-0.2	-0.7	-0.4	-0.3
Tobin's Q	3.2	1.5	0.8	3.9 ⁺	1.9	1.0
Manufacture	-27.9	-0.3	-0.4	-24.4	2.1	1.4
Construction	-40.2	-25.2	-22.7	-26.0	-14.5	-13.5
Retail	-2.1	31.6	34.1	-13.3	25.9	28.9
Transport/storage	-74.4	-29.2	-19.6	-58.8	-12.2	-7.1
Accommodation/food	-6.6	1.9	-1.8	-0.7	-13.1	-28.7
Information/communication	-25.8	-6.0	-6.5	-16.7	0.5	-1.4
Finance/insurance/real estate	-36.5	-11.1	-13.4	-36.8	-11.4	-13.9
Professional/science/technology	-6.0	11.9	7.3	-10.9	4.4	0.5
Services	53.8	57.8 ⁺	42.4 ⁺	60.9	62.7*	46.4*
Intercept	-251.1*	-131.5 ⁺	-63.6	-256.9*	-137.0 ⁺	-68.1
N	223	223	223	212	212	212

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.3: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 100 Companies: International Wage Support

	Model 1			Model 2		
	Lower quartile	Median	Upper quartile	Lower quartile	Median	Upper quartile
2020/q2 – 2021/q1	-26.0**	-15.9*	-10.6*	-26.6**	-16.0*	-11.1*
2021/q2 – 2022/q1	-0.9	1.4	1.5	-1.9	0.9	0.8
Received intl. wage support	41.8	44.6*	42.6*	23.8	31.8	22.8
Received intl. wage support * 20/q2	-42.5	-49.7**	-46.9***	-36.8	-39.1+	-26.5+
Received intl. wage support * 21/q2	-13.0	-30.1+	-27.4*	-3.0	-11.9	2.4
Change in CEO - Yes	-21.5+	-14.4	-11.7+	-21.5+	-14.8+	-12.0+
Option B	4.9	13.9	16.6	-6.3	4.9	9.1
Option C	16.9	13.7	19.8	23.4	20.2	26.9+
Log turnover	25.5***	13.6**	7.4+	25.9***	14.1**	7.9*
Number of employees ('000s)	-0.1	0.0	0.0	-0.1	0.0	0.1
ROA	-0.3	-0.1	0.0	-0.5	-0.2	-0.1
Tobin's Q	2.8	1.1	0.5	3.3	1.5	0.8
Manufacture	-30.1	-1.0	-0.6	-27.3	0.3	0.2
Construction	-39.9	-22.7	-18.8	-32.5	-15.9	-12.4
Retail	-8.3	29.0	32.7	-19.1	22.3	26.8
Transport/storage	-81.8+	-32.8	-22.3	-59.2	-12.6	-7.3
Accommodation/food	-26.2	-5.0	-4.8	-24.4	-27.5	-38.4
Information/communication	-27.1	-5.5	-4.7	-22.6	-1.9	-1.8
Finance/insurance/real estate	-36.4	-10.9	-13.1	-36.7	-11.1	-13.6
Professional/science/technology	-7.7	13.0	9.7	-16.0	2.4	0.1
Services	50.2	57.4+	43.6+	53.3	59.2*	45.3*
Intercept	-242.8*	-124.2	-59.1	-247.2*	-131.3+	-67.7
N	223	223	223	212	212	212

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.4: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 100 Companies: Deferred tax

	Model 1			Model 2		
	Lower		Upper	Lower		Upper
	quartile	Median	quartile	quartile	Median	quartile
2020/q2 – 2021/q1	-30.4***	-21.4**	-15.5**	-29.6**	-19.7**	-13.6**
2021/q2 – 2022/q1	-2.3	-2.5	-2.2	-2.2	-0.7	0.4
Received Deferred Tax	-37.7	-25.0	-10.5	-38.7	-35.8	-25.8
Received Deferred Tax * 2020/q2	-13.2	-9.9	-15.1	-12.4	-2.3	-5.3
Received Deferred Tax * 2021/q2	-4.4	1.9	4.4	2.7	10.3	13.2
Change in CEO - Yes	-20.6	-13.4	-11.3	-20.3	-12.6	-10.3
Option B	3.6	13.2	16.4	-7.4	4.3	8.8
Option C	12.1	10.6	18.7	20.5	19.0	26.9 ⁺
Log turnover	26.0***	14.3**	7.9*	25.4***	13.8**	7.4*
Number of employees ('000s)	-0.1	-0.0	0.0	-0.0	0.1	0.1
ROA	-0.3	-0.1	-0.1	-0.5	-0.2	-0.1
Tobin's Q	3.2	1.4	0.8	3.6	1.7	1.0
Manufacture	-25.5	2.0	1.6	-24.5	3.2	2.8
Construction	-38.2	-21.3	-17.9	-31.5	-15.4	-12.4
Retail	3.5	38.1	40.0 ⁺	-13.2	28.6	31.8 ⁺
Transport/storage	-72.0	-24.0	-13.5	-61.8	-14.3	-8.7
Accommodation/food	24.2	29.7	20.9	-3.1	-5.9	-19.5
Information/communication	-20.3	-0.9	-1.8	-16.8	2.7	1.7
Finance/insurance/real estate	-36.9	-11.2	-13.6	-37.7	-12.1	-14.6
Professional/science/technology	-4.3	16.1	12.3	-14.8	4.3	1.6
Services	55.6	61.8*	47.3*	55.2	61.5*	47.2*
Intercept	-248.3*	-131.1 ⁺	-65.0	-240.3*	-125.7 ⁺	-60.8
N	223	223	223	212	212	212

Notes: *** p < .001; ** p < .01; * p < .05; ⁺ p < .1

Table A5.5: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 100 Companies: Business Rates Relief (BRR)

	Model 1			Model 2		
	Lower		Upper	Lower		Upper
	quartile	Median	quartile	quartile	Median	quartile
2020/q2 – 2021/q1	-29.4**	-16.5*	-10.8*	-29.3**	-16.5*	-10.7*
2021/q2 – 2022/q1	-7.2	-2.0	-0.6	-6.1	-1.2	0.1
Received BRR	62.1*	66.4***	58.2***	42.1	43.3*	32.1*
Received BRR * 2020/q2	-11.8	-33.5*	-34.7**	-8.1	-27.4	-26.0+
Received BRR * 2021/q2	36.7	2.4	-4.8	40.0	13.7	12.8
Change in CEO - Yes	-22.1+	-14.7+	-11.7+	-21.6+	-14.3	-11.3+
Option B	-3.7	7.1	11.3	-9.6	2.7	7.8
Option C	9.3	8.1	15.9	14.3	14.8	23.6
Log turnover	24.9***	13.8**	7.7*	25.3***	13.9**	7.6*
Number of employees ('000s)	-0.0	0.0	0.0	-0.0	0.0	0.1
ROA	-0.4	-0.1	-0.0	-0.5	-0.2	-0.1
Tobin's Q	3.1	1.3	0.7	3.3	1.5	0.7
Manufacture	-31.1	-1.9	-0.8	-29.3	-0.3	0.5
Construction	-46.0	-26.8	-21.8	-39.3	-20.8	-16.2
Retail	-32.7	10.0	18.5	-38.2	10.2	18.9
Transport/storage	-72.2	-23.8	-13.1	-59.8	-12.5	-7.2
Accommodation/food	-56.7	-29.4	-20.9	-42.3	-34.0	-38.5
Information/communication	-33.4	-9.9	-8.0	-28.5	-6.0	-4.8
Finance/insurance/real estate	-35.3	-9.4	-11.7	-35.6	-10.1	-12.8
Professional/science/technology	-10.2	11.8	9.4	-13.1	5.7	2.9
Services	55.7	62.9*	48.9*	56.1	62.8*	48.3*
Intercept	-230.2*	-125.5+	-63.9	-235.5*	-128.2+	-63.9
N	223	223	223	212	212	212

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.6: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 100 Companies: CCFE

	Model 1			Model 2		
	Lower		Upper	Lower		Upper
	quartile	Median	quartile	quartile	Median	quartile
2020/q2 – 2021/q1	-31.4***	-22.0***	-16.3**	-30.6**	-19.8**	-13.7**
2021/q2 – 2022/q1	-6.9	-5.6	-5.0	-7.6	-3.9	-2.3
Received CCFE	-33.3	-26.3	-24.1	-31.7	-15.9	-10.9
Received CCFE * 2020/q2	0.6	-0.4	-1.0	8.6	3.2	1.4
Received CCFE * 2021/q2	52.3 ⁺	38.2 ⁺	37.0*	72.6*	50.3*	46.0**
Change in CEO - Yes	-21.9 ⁺	-14.5	-11.9 ⁺	-22.2 ⁺	-15.2 ⁺	-12.5*
Option B	5.0	14.0	16.7	-6.4	5.1	9.3
Option C	16.7	13.4	19.7	23.0	21.0	27.6 ⁺
Log turnover	27.2***	15.2**	8.8*	26.7***	14.8**	8.4*
Number of employees ('000s)	-0.1	-0.0	0.0	-0.1	0.0	0.1
ROA	-0.3	-0.1	-0.0	-0.6	-0.3	-0.1
Tobin's Q	3.0	1.3	0.7	3.5	1.7	1.0
Manufacture	-25.3	2.5	2.7	-25.5	1.5	1.2
Construction	-37.5	-20.6	-16.9	-31.1	-15.1	-11.9
Retail	1.3	37.0	40.2 ⁺	-15.0	26.1	29.8
Transport/storage	-68.2	-20.9	-11.1	-58.0	-11.8	-6.9
Accommodation/food	6.4	20.8	19.8	-14.1	-19.6	-32.4
Information/communication	-26.5	-5.1	-4.3	-22.3	-1.8	-1.8
Finance/insurance/real estate	-35.9	-10.5	-12.9	-36.2	-11.1	-13.7
Professional/science/technology	-3.5	16.6	13.0	-13.6	4.8	2.2
Services	59.3	64.9*	50.5*	57.1	62.0*	47.3*
Intercept	-264.9*	-143.8 ⁺	-76.9	-257.0*	-139.2 ⁺	-73.3
N	223	223	223	212	212	212

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.7: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 250 Companies: CJRS Grants

	Model 1			Model 2		
	Lower	Median	Upper	Lower	Median	Upper
	quartile		quartile	quartile		quartile
2020/q2 – 2021/q1	-6.6	-4.3	-2.5	-7.2	-4.9	-2.9
2021/q2 – 2022/q1	5.4	3.4	3.2	3.9	2.4	2.4
Received CJRS grants	6.4	9.0	9.7	9.9	11.6	12.3*
Received CJRS grants * 20/q2	-14.4	-15.1 ⁺	-14.0*	-17.8 ⁺	-17.7*	-15.5*
Received CJRS grants * 21/q2	1.9	2.4	0.4	8.4	7.6	3.3
Change in CEO - Yes	-3.1	-3.4	-3.1	-1.9	-2.3	-2.5
Option B	3.2	4.4	5.5	2.4	4.8	5.2
Option C	-6.6	-5.5	-6.5	-9.5	-7.1	-6.0
Log turnover	5.0	2.9	1.4	5.5	3.2	1.5
Number of employees ('000s)	0.1	0.2	0.3 ⁺	0.2	0.2	0.3
ROA	0.8*	0.6*	0.4 ⁺	0.7*	0.6*	0.4 ⁺
Tobin's Q	-4.0 ⁺	-3.2 ⁺	-2.2	-2.8	-2.1	-1.4
Manufacture	13.1	14.1	10.7	10.0	12.1	9.3
Construction	9.7	5.5	2.8	8.4	4.3	1.8
Retail	44.5*	42.0**	33.9**	33.7 ⁺	33.1*	27.8*
Transport/storage	15.0	10.2	1.6	11.5	7.6	0.2
Accommodation/food	16.4	13.5	11.9	36.7	19.5	13.0
Information/communication	33.9 ⁺	25.9 ⁺	17.2	30.3 ⁺	22.5	14.6
Finance/insurance/real estate	11.5	9.6	4.7	11.4	9.5	4.6
Professional/science/tech	29.6	25.8 ⁺	19.5	39.6*	35.7*	26.9*
Services	30.7 ⁺	25.7 ⁺	17.4	21.3	17.6	9.9
Intercept	-28.0	-13.5	-2.6	-34.4	-18.5	-4.8
N	322	322	322	297	297	297

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.8: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 250 Companies: International Wage Support

	Model 1			Model 2		
	Lower quartile	Median	Upper quartile	Lower quartile	Median	Upper quartile
2020/q2 – 2021/q1	-15.0*	-12.2*	-9.3*	-16.0**	-13.1**	-10.0**
2021/q2 – 2022/q1	6.6	4.7	2.5	5.3	3.8	1.8
Received intl. wage support	-3.6	-0.4	-1.1	-8.4	-5.3	-5.2
Received intl. wage support * 20/q2	6.0	2.7	0.8	3.9	1.7	0.8
Received intl. wage support * 21/q2	-0.3	-0.0	3.9	11.7	10.4	10.2
Change in CEO - Yes	-3.7	-4.1	-4.2	-3.5	-4.0	-4.1
Option B	3.3	5.0	5.9	2.8	5.5	5.9
Option C	-4.9	-3.9	-4.8	-6.5	-4.3	-3.3
Log turnover	5.6	3.4	1.9	6.4 ⁺	4.1	2.3
Number of employees ('000s)	0.1	0.2	0.3 ⁺	0.2	0.3	0.4 ⁺
ROA	0.9*	0.7*	0.5*	0.9*	0.7*	0.5*
Tobin's Q	-4.2 ⁺	-3.4 ⁺	-2.4	-3.0	-2.3	-1.7
Manufacture	15.3	16.5	12.8	14.4	16.4	13.2
Construction	11.2	7.4	4.5	11.6	7.7	4.6
Retail	45.9*	44.3**	35.9**	36.9*	36.8**	31.1**
Transport/storage	18.1	13.1	3.6	16.2	11.7	3.5
Accommodation/food	18.5	15.4	13.1	34.5	17.3	10.4
Information/communication	36.1 ⁺	28.6 ⁺	19.7	35.1*	27.3 ⁺	19.0
Finance/insurance/real estate	12.9	10.8	5.5	13.4	11.1	5.8
Professional/science/tech	31.9 ⁺	28.3 ⁺	21.6 ⁺	43.3*	39.4**	30.1*
Services	32.5 ⁺	28.3 ⁺	19.6	25.4	22.2	14.0
Intercept	-33.6	-19.2	-7.0	-45.4	-28.5	-12.5
N	322	322	322	297	297	297

Notes: *** p < .001; ** p < .01; * p < .05; ⁺ p < .1

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Table A5.9: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 250 Companies: Deferred tax

	Model 1			Model 2		
	Lower quartile	Median	Upper quartile	Lower quartile	Median	Upper quartile
2020/q2 – 2021/q1	-10.8+	-9.2*	-6.9+	-12.1*	-10.1*	-7.2*
2021/q2 – 2022/q1	5.8	3.7	3.4	7.5	5.3	4.1
Received Deferred Tax	2.1	2.7	3.9	13.1	12.8	13.1
Received Deferred Tax * 20/q2	-16.0	-13.6	-13.6	-19.5	-17.3+	-17.1*
Received Deferred Tax * 21/q2	5.1	7.2	1.7	5.2	7.0	1.7
Change in CEO - Yes	-2.8	-3.2	-3.0	-1.3	-1.8	-2.1
Option B	3.4	4.8	6.0	3.2	5.8	6.2
Option C	-5.0	-3.8	-4.4	-7.9	-5.5	-4.0
Log turnover	5.4	3.4	1.9	5.9+	3.7	2.0
Number of employees ('000s)	0.1	0.2	0.3+	0.2	0.3	0.3
ROA	0.9*	0.7*	0.5*	0.8*	0.7*	0.5*
Tobin's Q	-4.2+	-3.3+	-2.3	-2.8	-2.1	-1.4
Manufacture	14.7	16.1	12.8	11.5	13.8	11.0
Construction	10.8	6.9	4.4	9.1	5.2	2.6
Retail	45.8*	43.6**	36.0**	33.4+	32.8*	28.0*
Transport/storage	16.2	12.4	3.7	15.7	12.1	4.0
Accommodation/food	17.5	15.2	13.6	34.5	16.9	9.9
Information/communication	35.5+	28.2+	19.7	32.1+	24.6+	16.7
Finance/insurance/real estate	12.0	10.1	5.2	11.7	9.6	4.6
Professional/science/tech	30.8	27.7+	21.5+	42.5*	38.9**	29.8*
Services	32.2+	27.7+	19.6	23.8	20.4	12.7
Intercept	-32.7	-19.3	-8.1	-40.1	-24.2	-9.1
N	322	322	322	297	297	297

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.10: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 250 Companies: Business Rates Relief (BRR)

	Model 1			Model 2		
	Lower	Median	Upper	Lower	Median	Upper
	quartile		quartile	quartile		quartile
2020/q2 – 2021/q1	-10.6+	-8.5+	-6.0+	-11.3*	-9.1*	-6.4+
2021/q2 – 2022/q1	7.4	5.2	4.4	6.8	4.8	3.5
Received BRR	33.3*	37.9**	37.9***	24.8	31.1*	33.0**
Received BRR * 20/q2	-21.8	-22.3+	-24.1**	-33.7*	-31.9**	-29.6***
Received BRR * 21/q2	-8.1	-5.0	-8.1	10.9	11.6	5.8
Change in CEO - Yes	-2.8	-3.0	-2.7	-0.5	-0.9	-1.4
Option B	4.2	5.9	6.9	3.7	6.5	7.0
Option C	-8.2	-7.5	-7.9	-9.8	-8.4	-7.3
Log turnover	5.4	3.4	1.8	6.4+	4.3	2.5
Number of employees ('000s)	0.0	0.1	0.2	0.1	0.1	0.2
ROA	0.9*	0.7*	0.5*	0.8*	0.6*	0.4*
Tobin's Q	-3.7+	-2.8	-1.8	-2.6	-1.7	-1.0
Manufacture	12.9	14.4	11.1	11.8	14.0	10.9
Construction	10.1	6.6	3.9	10.5	6.7	3.8
Retail	32.5+	27.9+	21.0	27.8	23.9	18.1
Transport/storage	18.7	15.0	6.0	17.4	14.7	6.8
Accommodation/food	-1.2	-8.2	-8.5	18.8	-5.1	-12.7
Information/communication	32.3+	24.7	16.3	32.0+	23.8+	15.5
Finance/insurance/real estate	11.9	10.1	5.0	12.0	10.0	4.9
Professional/science/tech	29.6	26.1+	19.9	40.4*	36.1*	27.0*
Services	30.6+	26.1+	17.9	23.7	19.9	12.0
Intercept	-32.1	-19.5	-7.2	-46.1	-31.7	-15.5
N	322	322	322	297	297	297

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.11: Random-effects Coefficients from Models of Lower, Median, and Upper Employee Pay Quartiles Pay Ratios in FTSE 250 Companies: CCFE

	Model 1			Model 2		
	Lower	Median	Upper	Lower	Median	Upper
	quartile		quartile	quartile		quartile
2020/q2 – 2021/q1	-12.2*	-10.4*	-8.2*	-13.6**	-11.4**	-8.7**
2021/q2 – 2022/q1	7.7	5.5	4.4	9.4+	7.1+	5.0
Received CCFE	-13.4	-6.9	-6.2	-16.0	-8.8	-7.1
Received CCFE * 20/q2	-16.9	-15.0	-13.1	-20.8	-18.8	-15.7
Received CCFE * 21/q2	-11.8	-7.7	-9.1	-14.0	-8.6	-9.1
Change in CEO - Yes	-3.1	-3.6	-3.3	-1.8	-2.4	-2.6
Option B	4.5	5.7	6.7	3.6	6.1	6.5
Option C	-6.2	-4.2	-5.2	-5.3	-2.6	-2.2
Log turnover	5.9	3.7	2.2	6.8+	4.4	2.6
Number of employees ('000s)	0.2	0.3	0.4*	0.3	0.4	0.4+
ROA	0.9*	0.7*	0.5*	0.8*	0.6*	0.5*
Tobin's Q	-4.1+	-3.2+	-2.3	-2.9	-2.2	-1.6
Manufacture	17.6	18.4	14.8	16.2	17.8	14.4
Construction	11.4	7.8	5.0	12.2	8.3	5.2
Retail	48.0**	45.8**	37.7**	39.4*	38.6**	32.8**
Transport/storage	29.6	21.2	12.0	30.0	21.6	12.2
Accommodation/food	22.4	18.7	17.0	34.4	16.3	10.0
Information/communication	35.4+	28.6+	19.9	34.2+	27.1+	18.8
Finance/insurance/real estate	12.7	10.9	5.8	13.4	11.3	6.0
Professional/science/tech	29.5	27.1+	20.9	41.7*	38.5**	29.5*
Services	31.9+	28.0+	19.6	25.2	22.1	14.1
Intercept	-40.2	-25.1	-13.4	-54.3	-36.0	-19.6
N	322	322	322	297	297	297

Notes: *** p < .001; ** p < .01; * p < .05; + p < .1

Table A5.12: ATET Estimates from Difference-in-Difference Models testing the Impact of Government COVID Support on Lower Quartile, Median, and Upper Quartile Pay Ratios: FTSE 100 and FTSE 250 Companies

Support type	FTSE-100					
	Lower quartile		Median		Upper quartile	
	b	se	b	se	b	se
CJRS Grants	3.4	21.4	-2.2	16.5	4.0	12.1
International wage support	1.6	37.7	-11.4	30.2	1.6	22.4
Business rates relief	42.7	29.8	15.5	22.6	14.9	14.4
Deferred tax	-6.1	23.3	2.8	17.1	7.7	16.0
CCFF	74.6**	22.7	47.9*	21.3	42.2**	12.1
Support type	FTSE-250					
	Lower quartile		Median		Upper quartile	
	b	se	b	se	b	se
CJRS Grants	5.7	10.5	4.0	8.1	-1.1	6.5
International wage support	6.0	11.3	3.5	9.7	3.4	7.9
Business rates relief	12.7	17.5	10.6	14.8	4.2	14.3
Deferred tax	6.3	13.6	6.0	11.3	0.0	10.1
CCFF	-23.0	26.0	-18.9	22.7	-18.7	19.0

Notes: ATET=average treatment effect on the treated; ATET estimate adjusted for covariates, panel effects, and time effects; models control for turnover, number of employees, return on assets (ROA), and Tobin's Q; *** p < .001; ** p < .01; * p < .05

References

1. Brown, J. and E. Kirk-Wade (2021) *Coronavirus: A History of English Lockdown Laws*. London: House of Commons Library. Available from: <https://researchbriefings.files.parliament.uk/documents/CBP-9068/CBP-9068.pdf>, accessed, 31.09.22.
2. Office for National Statistics (2021) *Coronavirus and the Impact on Output in the UK Economy: December 2020*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/economy/grossdomesticproductgdp/articles/coronavirusandtheimpactonoutputintheukeconomy/august2021/pdf>, accessed, 31.09.22.
3. Office for National Statistics (2022) *GDP and Events in History: how the COVID-19 Pandemic shocked the UK Economy*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/economy/grossdomesticproductgdp/articles/gdpandeventsinhistoryhowthecovid19pandemicshockedtheukeconomy/2022-05-24>, accessed, 30.09.22.
4. Office for National Statistics (2021) *Impact of the Coronavirus (COVID-19) Pandemic on Retail Sales in 2020*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/economy/grossdomesticproductgdp/articles/impactofthecoronaviruscovid19pandemiconretailsalesin2020/2021-01-28/pdf>, accessed, 31.09.22.
5. Berry, C., L. Macfarlane, and S. Nanda (2020) *Who Wins and Who Pays?* London: Institute for Public Policy Research. Available from: https://www.ippr.org/files/2020-05/1589291707_who-wins-and-who-pays-may20.pdf, accessed, 11.05.22.
6. Hurley, J., et al. (2021) *Impacts of the Covid-19 Crisis: Evidence from 2 million UK SMEs*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2021/impacts-of-the-covid-19-crisis-evidence-from-2-million-uk-smes.pdf?la=en&hash=FC4EA425DDB9AD8762C268DF73F00FEF2216CAFD>, accessed, 18.07.22.
7. British Chamber of Commerce (2020) *Coronavirus Business Impact Tracker*. London: British Chamber of Commerce. Available from: <https://www.britishchambers.org.uk/media/get/Coronavirus%20Impact%20Tracker%208%20April%202020.pdf>.
8. British Chamber of Commerce (2020) *BCC Coronavirus Business Impact Tracker: Businesses not yet successfully accessing Government Loan and Grant Schemes*. London: British Chamber of Commerce. Available from: <https://www.britishchambers.org.uk/news/2020/04/bcc-coronavirus-business-impact-tracker-businesses-not-yet-successfully-accessing-government-loan-and-grant-schemes>.
9. Busetto, F., et al. (2022) *QE at the Bank of England: a Perspective on its functioning and effectiveness*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/quarterly-bulletin/2022/2022-q1/qe-at-the-bank-of-england-a-perspective-on-its-functioning-and-effectiveness>.
10. HM Revenue and Customs (2021) *Coronavirus Job Retention Scheme Statistics: 16 December 2021*. London: HMRC. Available from: <https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-16-december-2021/coronavirus-job-retention-scheme-statistics-16-december-2021>, accessed, 01.05.22.
11. Department for Business, Energy and Industrial Strategy (2022) *Draft Statutory Guidance on the United Kingdom Subsidy Control Regime*. London: Department for Business, Energy and Industry Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1088607/draft_statutory_guidance_on_the_subsidy_control_act_2022_for_consultation.pdf, accessed, 13.07.22.
12. Sunak, R. (2020) *Chancellor Statement to the House – Furlough Extension*. London: House of Commons. Available from: <https://www.gov.uk/government/speeches/chancellor-statement-to-the-house-furlough-extension>, accessed, 09.08.21.

13. HM Revenue and Customs (2020) *Coronavirus Job Retention Scheme: Evaluation Plan*. London: HMRC. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945800/The_Coronavirus_Job_Retention_Scheme_CJRS_Evaluation_Plan.pdf, accessed, 09.03.22.
14. Leslie, J. and K. Shah (2021) *The Wealth Gap Year: The Impact of the Coronavirus Crisis on UK Household Wealth*. London. Available from: <https://www.resolutionfoundation.org/app/uploads/2021/07/Wealth-gap-year.pdf>, accessed, 30.09.22.
15. Blundell, R., et al. (2020) 'COVID-19 and Inequalities'. *Fiscal Studies*, **41**(2): 291-319.
16. Cribb, J., et al. (2022) *Living Standards, Poverty and Inequality in the UK: 2022*. London: Institute of Fiscal Studies. Available from: https://ifs.org.uk/sites/default/files/output_url_files/R215-Living-standards-poverty-and-inequality-in-the-UK-2022.pdf, accessed, 31.09.22.
17. Blundell, R., et al. (2022) 'Inequality and the COVID-19 Crisis in the United Kingdom'. *Annual Review of Economics*, **14**(1): 607-636.
18. Handscomb, K. and L. Judge (2020) *Caught in a (Covid) Trap*. London: Resolution Foundation. Available from: <https://www.resolutionfoundation.org/app/uploads/2020/11/Caught-in-a-Covid-trap.pdf>, accessed, 31.09.22.
19. Office for National Statistics (2020) 'Business Impacts of Coronavirus (COVID-19) Survey Data. BICS Wave 17: 5 October to 18 October 2020'. *Business Impact of COVID-19 Survey (BICS)*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/file?uri=/economy/economicoutputandproductivity/output/datasets/businessimpactofcovid19surveybicsresults/bicswave16/bicswave162supressed.xlsx>, accessed, 13.05.22.
20. Office for National Statistics (2021) 'Jobs paid below Minimum Wage by Category'. *Annual Survey of Hours and Earnings*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/file?uri=/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/jobspaidbelowminimumwagebycategory/current/jobswelownmw2021combined.xls>, accessed, 13.05.22.
21. Department for Business, Energy and Industrial Strategy (2021) *Annual Report and Accounts 2020-21*. London: Department for Business, Energy and Industrial Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1036048/1210-APS-CCS0621807886-001_BEIS_ARA_20_21_Accessible.pdf, accessed, 14.07.22.
22. Comptroller and Auditor General (2021) *The Bounce Back Loan Scheme: an Update*. London: National Audit Office. Available from: <https://www.nao.org.uk/wp-content/uploads/2021/12/The-Bounce-Back-Loan-Scheme-an-update.pdf>, accessed, 17.07.22.
23. British Business Bank (2021) *FAQs for SMEs: Coronavirus Business Interruption Loan Scheme (CBILS)*. London: B.B. Bank. Available from: <https://www.british-business-bank.co.uk/ourpartners/coronavirus-business-interruption-loan-scheme-cbils-2/cbils-faqs-for-smes/#f8>, accessed, 14.08.21.
24. British Business Bank (2022) *Small Business Finance Markets 2021/22*. London: B.B. Bank. Available from: <https://www.british-business-bank.co.uk/wp-content/uploads/2022/02/Small-Business-Finance-Markets-Report-2022-FINAL.pdf>, accessed, 22.11.22.
25. Bank of England (2021) *The Impact of the Covid Pandemic on SME Indebtedness*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/api/foundation/pdf/HtmlToPdf?url=%2Fsitecore%2Fcontent%2FBoE%2FHome%2FBank-Overground%2F2021%2Fthe-impact-of-the-covid-pandemic-on-sme-indebtedness%3Fpdf%3D1>, accessed, 18.07.22.
26. Bank of England (2021) *Financial Stability In Focus: The Corporate Sector and UK Financial Stability | October 2021*. London: B.o. England. Available from: <https://www.bankofengland.co.uk/-/media/boe/files/financial-policy-summary-and-record/financial-stability-in-focus/2021/the-corporate-sector-uk-financial-stability.pdf>, accessed, 31.11.22.

27. British Business Bank (2021) *Small Business Finance Markets 2020/21*. London: B.B. Bank. Available from: <https://www.british-business-bank.co.uk/wp-content/uploads/2021/03/BBB-SBFM-Report-2021-Widescreen-AW-tagged-002.pdf>, accessed, 22.11.22.
28. Kalemli-Özcan, Ş., L. Laeven, and D. Moreno (2022) 'Debt Overhang, Rollover Risk, and Corporate Investment: Evidence from the European Crisis'. *Journal of the European Economic Association*, **20**(6): 2353-2395.
29. Department for Business, Energy and Industrial Strategy (2021) *Business Population Estimates for the UK and Regions 2021: Statistical Release*. London: Department for Business, Energy and Industrial Strategy. Available from: <https://www.gov.uk/government/statistics/business-population-estimates-2021/business-population-estimates-for-the-uk-and-regions-2021-statistical-release-html>, accessed, 14.05.22.
30. House of Commons Committee of Public Accounts (2022) *Bounce Back Loans Scheme: Follow-up. Fiftieth Report of Session 2021-22*. London: House of Commons. Available from: <https://committees.parliament.uk/publications/22002/documents/163618/default/>, accessed, 14.05.22.
31. Department for Business, Energy and Industrial Strategy (2022) *Annual Report and Accounts 2021-22*. London: Department for Business, Energy and Industrial Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1112556/beis-annual-report-and-accounts-2021-2022-print-ready.pdf, accessed, 14.07.22.
32. The Insolvency Service (2022) *Commentary - Company Insolvency Statistics April to June 2022*. London: The Insolvency Service. Available from: <https://www.gov.uk/government/statistics/company-insolvency-statistics-april-to-june-2022/commentary-company-insolvency-statistics-april-to-june-2022>, accessed, 09.12.22.
33. Office for National Statistics (2022) 'Total company insolvencies per quarter, seasonally adjusted, England and Wales'. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/generator?uri=/businessindustryandtrade/changestobusiness/bankruptcyin/solvency/articles/risingbusinessinsolvenciesandhighenergyprices/2022-10-07/b897f6c8&format=xls>, accessed, 09.12.22.
34. Office for Budget Responsibility (2022) *Commentary on the Public Sector Finances: March 2022*. London: Office for Budget Responsibility. Available from: <https://obr.uk/docs/dlm/uploads/Monthly-PSF-commentary-April-1.pdf>, accessed, 01.05.22.
35. Office for National Statistics (2022) *Public Sector Finances, UK: January 2022*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/bulletins/publicsectorfinances/january2022>, accessed, 01.05.22.
36. Office for National Statistics (2022) *Statistical Bulletin. UK Government Debt and Deficit: December 2021*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicspending/bulletins/ukgovernmentdebtanddeficitforeurostatmaast/december2021/pdf>, accessed, 14.05.22.
37. van Lerven, F., A. Stirling, and L. Prieg (2021) *Call Time: Replacing the Fiscal Rules with Fiscal Referees*. London: New Economics Foundation. Available from: <https://neweconomics.org/uploads/files/fiscal-referees.pdf>, accessed, 1.05.22.
38. Corlett, A. (2022) *Happy New Tax Year? National Insurance and Income Tax changes in 2022*. London: Resolution Foundation. Available from: <https://www.resolutionfoundation.org/app/uploads/2022/04/Happy-new-tax-year.pdf>, accessed, 02.05.22.
39. HM Revenue and Customs (2021) *Health and Social Care Levy*. London: HMRC. Available from: <https://www.gov.uk/government/publications/health-and-social-care-levy/health-and-social-care-levy>, accessed, 01.05.22.
40. Sunak, R. (2021) *Financial Statement*. London: House of Commons. Hansard, vol. 690. cols 252-262.

41. Institute for Fiscal Studies (2022) *Spring Statement 2022*. London: Institute for Fiscal Studies. Available from: <https://ifs.org.uk/spring-statement-2022>, accessed, 02.05.22.
42. Strauss, D. (2022) 'UK Civil Servants face real terms Pay Cut in 2022-23 as Living Costs soar'. *Financial Times*, 31.03. London.
43. Cabinet Office (2022) *Guidance: Civil Service Pay Remit guidance, 2022 to 2023* London: Cabinet Office. Available from: <https://www.gov.uk/government/publications/civil-service-pay-remit-guidance-2022-to-2023/civil-service-pay-remit-guidance-2022-to-2023>, accessed, 12.07.22.
44. Strauss, D. (2020) 'UK Public Sector Workers face real terms Pay Cut, Sunak confirms'. *Financial Times*, 25.11. London.
45. Hetherington, G. (2022) *400,000 People could be pulled into Poverty by real-terms Cut to Benefits in April*. Available from: <https://www.jrf.org.uk/press/400000-people-could-be-pulled-poverty-real-terms-cut-benefits-april>, accessed, 15.07.22.
46. Masters, C. and H. Anderson (2021) *UK heading for the biggest overnight Cut to the Basic Rate of Social Security since World War II*. Available from: <https://www.jrf.org.uk/press/uk-heading-biggest-overnight-cut-basic-rate-social-security-world-war-ii>, accessed, 17.05.22.
47. Chancellor of the Exchequer (2022) *Autumn Statement 2022*. London: His Majesty's Stationery Office. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1118429/CCS1022065440-001_SECURE_HMT_Autumn_Statement_November_2022_BOOK.pdf, accessed, 4.12.22.
48. StepChange (2020) *Coronavirus and Personal Debt: a Financial Recovery Strategy for Households*. Leeds: StepChange Debt Charity. Available from: <https://www.stepchange.org/Portals/0/assets/pdf/coronavirus-policy-briefing-stepchange.pdf>, accessed, 17.05.22.
49. Pro Bono Economics (2021) *The Impact of the Covid-19 Pandemic on Problem Debt in the UK*. London: Pro Bono Economics. Available from: <https://www.probonoeconomics.com/Handlers/Download.ashx?IDMF=d09aadde-3ace-4a98-8796-edf4f15f20fe>, accessed, 17.05.22.
50. Bell, T. (2021) *The Covid Certainty: more Savings for the Rich, more Debt for the Poor*. Available from: <https://www.resolutionfoundation.org/comment/the-covid-certainty-more-savings-for-the-rich-more-debt-for-the-poor/>, accessed, 17.05.22.
51. Department for Business, Energy and Industrial Strategy (2021) *Policy Paper: Overview of the Subsidy Control Transparency Obligations*. London: Department for Business, Energy and Industrial Strategy. Available from: <https://www.gov.uk/government/publications/subsidy-control-bill-policy-papers/overview-of-the-subsidy-control-transparency-obligations>, accessed, 12.05.22.
52. *The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008*. Available from: <https://www.legislation.gov.uk/uksi/2008/410/contents/made>, accessed, 24.02.22.
53. *The Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013*. Available from: <https://www.legislation.gov.uk/uksi/2013/1981/contents/made>, accessed, 06.03.22.
54. *The Companies (Directors' Remuneration Policy and Directors' Remuneration Report) Regulations 2019*. London: House of Commons. Available from: https://www.legislation.gov.uk/uksi/2019/970/pdfs/uksi_20190970_en.pdf, accessed, 24.02.22.
55. HM Treasury (2020) *Chancellor announces additional Support to protect Businesses*. London: HM Treasury. Available from: <https://www.gov.uk/government/news/chancellor-announces-additional-support-to-protect-businesses>, accessed, 01.08.22.
56. Department for Levelling Up, Housing and Communities (2021) *Business Rates Information Letter (6/2021): Business Rates Relief 2022-23 and additional information*. London: Department for Levelling Up, Housing and Communities. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1030188/BRIL_6-2021_-_Budget_Measures.pdf, accessed, 02.05.22.

57. Sport England (2020) *Government Sport Survival Package*. Available from: <https://www.sportengland.org/how-we-can-help/coronavirus/funding-innovation-and-flexibility/government-sport-survival-package#:~:text=The%20Sport%20Survival%20Package%20is%20a%20%C2%A3600%20million,coronavirus%20policy.%20Phase%201%20-%20Winter%20Survival%20Package>, accessed, 25.04.22.
58. Department for Digital Culture, Media and Sport and S. England (2020) *Sport Survival Package. Phase 2 Programme guide*. London: Department for Digital Culture, Media and Sport. Available from: <https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/2022-01/Sport%20Survival%20Package%20-%20programme%20guide..pdf?VersionId=RMTXa7TVBrRPuWmO7IzAn1Vz4qURs5QJ>, accessed, 25.04.22.
59. Department for Transport (2021) *Guidance. Applying for COVID-19 Airport and Ground Operations Funding* London: Department for Transport. Available from: <https://www.gov.uk/guidance/applying-for-covid-19-airport-and-ground-operations-funding>, accessed, 04.05.22.
60. HM Treasury (2020) *Policy Costings: November 2020*. London: HM Treasury. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937937/Policy_costings_2020_final.pdf, accessed, 13.05.22.
61. Hutton, G. and M. Keep (2022) *Coronavirus business support scheme: Statistics*. London: House of Commons. Available from: <https://researchbriefings.files.parliament.uk/documents/CBP-8938/CBP-8938.pdf>, accessed, 03.06.22.
62. HM Treasury (2021) *Budget 2021: Policy Costings*. London: HM Treasury. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/965777/Budget_2021_policy_costings_.pdf, accessed, 13.05.22.
63. Ministry of Housing, Communities and Local Government and Department for Levelling Up, Housing and Communities (2021) *National non-domestic rates collected by councils in England: forecast for 2021 to 2022*. Available from: <https://www.gov.uk/government/statistics/national-non-domestic-rates-collected-by-councils-in-england-forecast-for-2021-to-2022>, accessed, 15.05.22.
64. Seely, A. (2022) *VAT on Tourism*. London: House of Commons. Available from: <https://researchbriefings.files.parliament.uk/documents/SN06812/SN06812.pdf>, accessed, 15.05.22.
65. Office for Budget Responsibility (2020) *Economic and Fiscal Outlook November 2020*. London: Office for Budget Responsibility. Available from: https://obr.uk/docs/dlm_uploads/CCS1020397650-001_OBR-November2020-EFO-v2-Web-accessible.pdf, accessed, 04.05.22.
66. Office for Budget Responsibility (2021) *Economic and Fiscal Outlook October 2021*. London: Office for Budget Responsibility. Available from: https://obr.uk/docs/dlm_uploads/CCS1021486854-001_OBR-EFO-October-2021_CS_Web-Accessible_v2.pdf, accessed, 17.05.22.
67. HM Treasury (2021) *Policy Paper. Budget 2021*. London: HM Treasury. Available from: <https://www.gov.uk/government/publications/budget-2021-documents/budget-2021-html>, accessed, 15.05.22.
68. Office for Budget Responsibility (2021) *Economic and Fiscal Outlook March 2021*. London: Office for Budget Responsibility. Available from: https://obr.uk/docs/dlm_uploads/CCS1021486854-001_OBR-EFO-October-2021_CS_Web-Accessible_v2.pdf, accessed, 17.05.22.
69. HM Treasury (2020) *Policy Paper. Spending Review 2020*. London: HM Treasury. Available from: <https://www.gov.uk/government/publications/spending-review-2020-documents/spending-review-2020>, accessed, 17.08.22.
70. Hutton, G. (2020) *Eat Out to Help Out Scheme*. London: House of Commons. Available from: <https://researchbriefings.files.parliament.uk/documents/CBP-8978/CBP-8978.pdf>, accessed, 02.06.22.
71. HM Revenue and Customs (2020) *Official Statistics: Eat Out to Help Out Statistics Commentary*. London: HMRC. Available from: <https://www.gov.uk/government/statistics/eat-out-to-help-out-statistics/eat-out-to-help-out-statistics-commentary>, accessed, 04.05.22.

72. Department for Business, Energy and Industrial Strategy (2022) *All Business Support COVID Grants (April 2022)*. London: Department for Business, Energy and Industrial Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1073854/all-business-support-covid-grants-by-la-april-2022.ods, accessed, 04.05.22.
73. Scottish Government (2021) *Coronavirus (COVID-19): Local Authority Discretionary Fund - Information*. Edinburgh: Scottish Government. Available from: https://webarchive.nrscotland.gov.uk/web/20220308000721if_/https://www.gov.scot/publications/coronavirus-covid-19-local-authority-discretionary-fund---information/pages/overview/, accessed, 20.10.22.
74. Department for Transport (2022) *Explanatory Memorandum to the Mandatory Travel Concession (England) (Amendment) Regulations 2022*. Department for Transport. Available from: https://www.legislation.gov.uk/uksi/2022/284/pdfs/uksiem_20220284_en.pdf.
75. Department for Transport (2022) *Written Evidence to the Transport Select Committee Inquiry. National Bus Strategy: One Year On*. London: Department for Transport. Available from: <https://committees.parliament.uk/writtenevidence/107843/pdf/>.
76. Department for Transport (2021) *Written Statement to Parliament supporting vital Bus Services: Recovery Funding*. London: Department for Transport. Available from: <https://www.gov.uk/government/speeches/supporting-vital-bus-services-recovery-funding>, accessed, 15.05.22.
77. Department for Transport (2022) *Written Statement to Parliament. Local Transport Update: Financial Support for Bus and Light Rail Services* London: Department for Transport. Available from: <https://www.gov.uk/government/speeches/local-transport-update-financial-support-for-bus-and-light-rail-services>, accessed, 17.08.22.
78. Vale of Glamorgan Neighbourhood Services and Transport (2021) *Bus Emergency Scheme (BES) – Request to Councils to sign up to the BES 2 Scheme*. Barry: Vale of Glamorgan Neighbourhood Services and Transport. Available from: <https://www.valeofglamorgan.gov.uk/Documents/Committee%20Reports/Cabinet/2021/21-01-25/Bus-Emergency-Scheme.pdf>, accessed, 16.05.22.
79. Waters, L. (2021) *Written Statement: Additional Funding and a New Partnership for Bus Operations in Wales*. Cardiff: Welsh Government. Available from: <https://gov.wales/written-statement-additional-funding-and-new-partnership-bus-operations-wales>, accessed, 16.05.22.
80. Department for Transport (2022) 'Operational Support to Franchised Passenger Rail Operators under Emergency Agreements, 1 March 2020 – 16 October 2021'. *Transparency Data*. London: Department for Transport. Available from: <https://www.gov.uk/government/publications/dft-payments-to-passenger-rail-operators-under-emergency-agreements/details-of-operational-support-payments-to-franchised-passenger-rail-operators-under-emergency-agreements>, accessed, 21.02.22.
81. Department for Transport (2021) 'Performance Scores and Fees due to Franchised Passenger Rail Operators under Emergency Measures Agreements (EMAs) and Emergency Recovery Measures Agreements (EMRAs), March 2020 to March 2021'. *Transparency Data*. London: Department for Transport. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1027320/ema-and-erma-performance-scores-and-fees.ods, accessed, 01.06.22.
82. Transport Scotland (2020) *Payments to Rail Franchises under the Emergency Measures Agreements - March to September 2020*. Edinburgh: Transport Scotland. Available from: <https://www.transport.gov.scot/publication/payments-to-rail-franchises-under-the-emergency-measures-agreements-march-to-september-2020/>, accessed, 01.06.22.
83. Transport Scotland (2021) *Payments to Rail Franchises under the Emergency Measures Agreements - September 2020 to March 2021*. Edinburgh: Transport Scotland. Available from: <https://www.transport.gov.scot/publication/payments-to-rail-franchises-under-the-emergency-measures-agreements-september-2020-to-march-2021/>, accessed, 01.06.22.

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84. Transport Scotland (2020) *Performance Scores and Management Fees due to Scottish franchised Passenger Rail Operators under Emergency Measures Agreements (EMAs), March - September 2020*. Edinburgh: Transport Scotland. Available from: <https://www.transport.gov.scot/media/50085/ema1-performance-and-management-fees.xlsx>, accessed, 01.06.22.
85. Transport Scotland (2021) *Performance Scores and Management Fees due to Scottish franchised Passenger Rail Operators under Emergency Measures Agreements (EMAs), September 2020 - March 2021*. Edinburgh: Transport Scotland. Available from: <https://www.transport.gov.scot/media/50293/ema2-performance-fees.xlsx>, accessed, 1.06.22.
86. HM Revenue and Customs (2021) *Changes to the Coronavirus Job Retention Scheme from July 2021*. HMRC. Available from: <https://www.gov.uk/government/publications/changes-to-the-coronavirus-job-retention-scheme/changes-to-the-coronavirus-job-retention-scheme>, accessed, 11.08.21.
87. Taylor, A. (2009) 'High Cost of Redundancy is revealed'. *Financial Times*, 4.01. London.
88. Office for National Statistics (2021) *An Overview of Workers who were furloughed in the UK: October 2021*. London: Office for National Statistics. Available from: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/anoverviewofworkerswhowerefurloughedintheuk/october2021>, accessed, 1.10.22.
89. Dixons Carphone PLC (2021) *Annual Report and Accounts 20/21*. London: Dixons Carphone PLC.
90. Renishaw PLC (2022) *Annual Report 2021*. Wotton-under-Edge: R. PLC.
91. HM Treasury (2021) *HM Treasury Coronavirus (COVID-19) Business Loan Scheme Statistics*. London: HM Treasury. Available from: <https://www.gov.uk/government/collections/hm-treasury-coronavirus-covid-19-business-loan-scheme-statistics>, accessed, 13.08.21.
92. British Business Bank (2020) *FAQs for Small Businesses: Bounce Back Loan Terms*. Available from: <https://www.british-business-bank.co.uk/ourpartners/coronavirus-business-interruption-loan-schemes/bounce-back-loans/faqs-for-small-businesses/>, accessed, 20.05.22.
93. British Business Bank (2021) *FAQs for Businesses: Coronavirus Large Business Interruption Loan Scheme (CLBILS)*. London: British Business Bank. Available from: <https://www.british-business-bank.co.uk/ourpartners/coronavirus-business-interruption-loan-schemes/clbils/faqs-for-businesses/>, accessed, 14.08.21.
94. Bank of England (2020) *The Covid Corporate Financial Facility (CCFF): CCFF Operating Procedures*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/-/media/boe/files/markets/covid-corporate-financing-facility/operating-procedures.pdf?la=en&hash=F41A1E77668304285BE3B0E22EA12E0DE69673EF&hash=F41A1E77668304285BE3B0E22EA12E0DE69673EF>, accessed, 23.02.2022.
95. Bank of England (2021) *Covid Corporate Financing Facility (CCFF)*. Available from: <https://www.bankofengland.co.uk/markets/covid-corporate-financing-facility>, accessed, 11.08.21.
96. Lloyds Banking Group PLC (2021) *Annual Report and Accounts 2020*. London: Lloyds Banking Group PLC.
97. NatWest Group (2021) *Annual Report and Accounts 2020*. London: NatWest Group.
98. HSBC UK Bank PLC (2022) *Annual Report and Accounts 2021*. London: HSBC UK Bank PLC.
99. Barclays PLC (2022) *Annual Report 2021*. London: Barclays PLC.
100. NatWest Group (2022) *Annual Report and Accounts 2021*. London: NatWest Group.
101. Barclays PLC (2021) *Annual Report 2020*. London: Barclays PLC.
102. TSB Bank PLC (2021) *Annual Report and Accounts 2020*. Edinburgh: TSB Bank PLC.
103. Degryse, H. and C. Huylebroek (2022) 'Preventing a Banking Crisis: Fiscal Support and Loan Loss Provisions during the COVID-19 Pandemic'. *SSRN Electronic Journal*.
104. HSBC Holdings PLC (2021) *Annual Report and Accounts 2020*. London: HSBC Holdings PLC.
105. Altavilla, C., et al. (2021) 'Loan Guarantees, Bank Lending and Credit Risk Reallocation'. *SSRN Electronic Journal*.
106. Bank of International Settlements (2019) *Risk-based capital requirements RBC20 Calculation of minimum risk-based capital requirements*. Basel: Bank of International Settlements. Available from:

202 The Distributional Impact of COVID-19 Government Support for Business

- https://www.bis.org/basel_framework/chapter/RBC/20.htm?inforce=20191215&published=20191215&export=pdf, accessed, 30.10.22.
107. Close Brothers Group PLC (2022) *Annual Report 2021*. London: Close Brothers PLC.
 108. Ministry of Housing, Communities and Local Government (2020) *Expanded retail discount 2020 to 2021: coronavirus response – local authority guidance*. London: Ministry of Housing, Communities and Local Government. Available from: <https://www.gov.uk/government/publications/business-rates-retail-discount-guidance/expanded-retail-discount-2020-to-2021-coronavirus-response-local-authority-guidance>, accessed, 24.08.21.
 109. Ministry of Housing, Communities and Local Government (2020) *Business Rates. Expanded Retail Discount 2020/21: Coronavirus Response – Local Authority Guidance*. London: Ministry of Housing, Communities and Local Government. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/919752/Expanded_Retail_Discount_Guidance_02.04.20.pdf, accessed, 15.05.22.
 110. Sweney, M. (2020) 'Tesco and Morrisons to repay £850m of Covid business rates relief'. *The Guardian*, 2.12. London.
 111. Anon (2020) 'GVC estimates £150m earnings decline from sports shutdown'. *iGB*, 16.03.
 112. Anon (2020) 'Flutter warns of £110m earnings hit from sports suspensions'. *iGB*, 16.03.
 113. Dugher, M. and B. Simmonds (2020) *Letter to Rt. Hon. Rushi Sunak MP*. London: The Betting and Gaming Council. Available from: <https://bettingandgamingcouncil.com/uploads/Downloads/Letter-to-Chancellor-re-Budget-2021-Unlocking-the-Economy-260221.pdf>.
 114. Next PLC (2022) *Annual Report and Accounts 2022*. London: Next PLC.
 115. HM Revenue and Customs (2021) *Policy Paper. Legislating for the VAT deferral new Payment Scheme and Deterrent*. London: HMRC. Available from: <https://www.gov.uk/government/publications/legislating-for-the-vat-deferral-new-payment-scheme-and-deterrent/legislating-for-the-vat-deferral-new-payment-scheme-and-deterrent>, accessed, 01.06.22.
 116. HM Revenue and Customs (2020) *Guidance: VAT - reduced Rate for Hospitality, Holiday Accommodation and Attractions*. London: HMRC. Available from: <https://www.gov.uk/guidance/vat-reduced-rate-for-hospitality-holiday-accommodation-and-attractions>, accessed, 04.05.22.
 117. Whitbread PLC (2021) *Annual Report and Accounts 2021*. London: Whitbread PLC.
 118. Whitbread PLC (2022) *Annual Report and Accounts 2022*. London: Whitbread PLC.
 119. J.D. Wetherspoon PLC (2021) *Annual Report and Financial Statements 2021*. Watford: J.D. Wetherspoon.
 120. J.D. Wetherspoon PLC (2020) *Annual Report and Financial Statements 2020*. Watford: J.D. Wetherspoon.
 121. Domino's Pizza Group PLC (2021) *Annual Report and Accounts 2020*. Milton Keynes: Domino's Pizza Group PLC.
 122. Mitchells & Butlers (2022) *Annual Report and Accounts 2021*. Birmingham: Mitchells & Butlers.
 123. HM Treasury (2021) *Policy Paper. Plan for Jobs: Progress Update*. London: HM Treasury. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1016764/Plan_for_Jobs_FINAL.pdf, accessed, 01.05.22.
 124. González-Pampillón, N., G. Nunez-Chaim, and K. Ziegler (2021) *Recovering from the first Covid-19 Lockdown: Economic Impacts of the UK's Eat Out to Help out Scheme*. London: Centre for Economic Performance. Available from: <https://cep.lse.ac.uk/pubs/download/cepcovid-19-018.pdf>, accessed, 19.10.22.
 125. Department for Business, Energy and Industrial Strategy (2020) *Guidance: Check if you're eligible for the Coronavirus Retail, Hospitality and Leisure Grant Fund* London: Department for Business, Energy and Industrial Strategy. Available from: <https://www.gov.uk/guidance/check-if-youre-eligible-for-the-coronavirus-retail-hospitality-and-leisure-grant-fund>.

203 The Distributional Impact of COVID-19 Government Support for Business

126. Department for Business, Energy and Industrial Strategy (2020) *Grant Funding Schemes Small Business Grant Fund and Retail, Hospitality and Leisure Grant Fund: Guidance for Local Authorities*. London: Department for Business, Energy and Industrial Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907955/business-support-grants-funding-schemes-local-authorities-guidance-v6.pdf, accessed, 15.05.22.
127. Local Government and Communities Directorate and Local Government & Analytical Services Division (2020) *Local Government Finance Circular No. 08/2020 (updated 4 May 2020)*. Edinburgh: Scottish Government. Available from: <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/05/local-government-finance-circular-8-2020-covid-19-grant-funding-achemes-as-amended/documents/local-government-finance-circular-8-2020-covid-19-grant-funding-schemes-as-amended/local-government-finance-circular-8-2020-covid-19-grant-funding-schemes-as-amended/govscot%3Adocument/Local%2BGovernment%2BFinance%2BCircular%2B08%2B2020.pdf>, accessed, 13.05.22.
128. Invest Northern Ireland (2020) *Coronavirus: £25,000 Retail, Hospitality, Tourism and Leisure Grant*. Belfast: Invest Northern Ireland. Available from: <https://www.nibusinessinfo.co.uk/content/coronavirus-%C2%A325000-retail-hospitality-tourism-and-leisure-grant>, accessed, 13.05.22.
129. Invest Northern Ireland (2020) *£25,000 Business Support Grant Scheme Guidance and Frequently Asked Questions*. Belfast: Invest Northern Ireland. Available from: <https://www.nibusinessinfo.co.uk/sites/default/files/2020-10/Coronavirus-%C2%A325000-Retail-Hospitality-Tourism-And-Leisure-Grant-Scheme-FAQs-V1.9-20Oct2020.pdf>, accessed, 13.05.22.
130. Department for Business, Energy and Industrial Strategy (2021) *Check if you're eligible for the Omicron Hospitality and Leisure Grant*. London: Department for Business Energy, and Industrial Strategy. Available from: <https://www.gov.uk/guidance/check-if-youre-eligible-for-the-omicron-hospitality-and-leisure-grant>, accessed, 02.05.22.
131. Department for Business, Energy and Industrial Strategy (2021) *Omicron Hospitality and Leisure Grant Guidance for Local Authorities*. London: Department for Business, Energy and Industrial Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1048968/omicron-hospitality-and-leisure-grant-guidance.pdf, accessed, 02.05.22.
132. Welsh Government (2021) *Written Statement: £120m of Emergency Support for Businesses*. Cardiff: Welsh Government. Available from: <https://gov.wales/written-statement-120m-emergency-support-businesses>.
133. Department of Finance Northern Ireland (2022) *Omicron Hospitality Payment: Scheme Guidance*. Belfast: Department of Finance, Northern Ireland. Available from: <https://www.nibusinessinfo.co.uk/sites/default/files/2022-03/Omicron-Hospitality-Payment-Scheme-Guidance-V6-7-Mar-2022.pdf>, accessed, 19.10.22.
134. Department for Business, Energy and Industrial Strategy (2020) *Prime Minister announces £1,000 Christmas grant for 'wet-led pubs'*. Available from: <https://www.gov.uk/government/news/prime-minister-announces-1000-christmas-grant-for-wet-led-pubs>, accessed, 02.05.20.
135. Department for Business, Energy and Industrial Strategy (2021) *Christmas Support Payment for wet-led pubs Guidance for Local Authorities (updated 4 March 2021)*. London: Department for Business, Energy and Industrial Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/983288/withdrawn-christmas-support-payment-for-wet-led-pubs-la-guidance.pdf, accessed, 02.05.22.
136. Department for Transport (2021) *Guidance: Apply for the COVID-19 Bus Service Support Grant*. London: Department for Transport. Available from: <https://www.gov.uk/guidance/apply-for-the-covid-19-bus-service-support-grant>, accessed, 15.01.22.

204 The Distributional Impact of COVID-19 Government Support for Business

137. Maclean, R. (2020) *Written Answer*. Hansard: UK Parliament. Available from: <https://questions-statements.parliament.uk/written-questions/detail/2020-06-30/66972/>.
138. Department for Transport (2021) *Claiming the Bus Recovery Grant*. London: Department for Transport. Available from: <https://www.gov.uk/guidance/claiming-the-bus-recovery-grant>, accessed, 01.05.22.
139. Department for Transport (2021) *Bus Back Better. National Bus Strategy for England*. London: Department for Transport. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/980227/DfT-Bus-Back-Better-national-bus-strategy-for-England.pdf, accessed, 01.05.22.
140. Transport Scotland (2020) *Public Service Contract between the Scottish Ministers acting through their executive agency Transport Scotland and the "Operator"*. Edinburgh: Transport Scotland. Available from: <https://www.transport.gov.scot/media/50249/baat-covid-19-public-service-contract-model-contract.pdf>, accessed, 01.05.22.
141. Transport Scotland (2022) *COVID-19 Support Grant*. Available from: <https://www.transport.gov.scot/public-transport/buses/covid-19-support-grant/>, accessed, 01.05.22.
142. Bank of England (2021) *Covid Corporate Financing Facility (CCFF). CCFF Operating Procedures*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/markets/covid-corporate-financing-facility>, accessed, 11.08.21.
143. Transport Scotland (2020) *Public Service Contract*. Edinburgh: Transport Scotland. Available from: <https://www.transport.gov.scot/media/50249/baat-covid-19-public-service-contract-model-contract.pdf>, accessed, 01.06.22.
144. Department for Transport (2022) *DfT Payments to Passenger Rail Operators under Emergency Agreements and National Rail Contracts*. London: Department for Transport. Available from: <https://www.gov.uk/government/publications/dft-payments-to-passenger-rail-operators-under-emergency-agreements>, accessed, 01.06.22.
145. Woods, S. (2020) *Letters from Sam Woods to UK deposit takers on dividend payments, share buybacks and cash bonuses*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/prudential-regulation/letter/2020/letter-from-sam-woods-to-uk-deposit-takers-on-dividend-payments-share-buybacks-and-cash-bonuses>, accessed, 16.05.22.
146. Bank of England (2022) *Financial Market Infrastructure Supervision*. Available from: <https://www.bankofengland.co.uk/financial-stability/financial-market-infrastructure-supervision>, accessed, 17.05.22.
147. Woods, S. (2020) *Letter from Sam Woods to insurers on distribution of profits (31st March)*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/letter/2020/letter-from-sam-woods-to-insurers-distribution-of-profits.pdf?la=en&hash=C1FF7D6C560E1C377CC35C1513E27F16646A1B70>, accessed, 16.07.22.
148. Cunliffe, J. (2020) *Letter from Sir Jon Cunliffe to FMIs on distribution of profits (4th June)*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/-/media/boe/files/letter/2020/letter-from-sir-jon-cunliffe-to-fmis-on-distribution-of-profits.pdf?la=en&hash=55B6FBE6D9DC91D9026C9375CF109F2F703DE857>, accessed, 17.05.22.
149. Cunliffe, J. (2021) *Letter from Sir Jon Cunliffe to FMIs on distribution of profits (11 November)*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/-/media/boe/files/letter/2021/november/letter-to-firms-on-distribution-of-profits.pdf?la=en&hash=E66CEA1AD217E0466A34AE9E3DD61C509E9B4FE1>, accessed, 17.05.22.
150. Prudential Regulation Authority (2020) *PRA Statement on Capital Distributions by large UK Banks*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/api/foundation/pdf/HtmlToPdf?url=%2Fsitecore%2Fcontent%2FBoE%2FHome%2Fprudential-regulation%2Fpublication%2F2020%2Fpra-statement-on-capital-distribution-by-large-uk-banks%3Fpdf%3D1>, accessed, 16.05.22.
151. Prudential Regulation Authority (2021) *PRA Statement: Update on Shareholder Distributions by large UK Banks*. London: Bank of England. Available from:

- <https://www.bankofengland.co.uk/api/foundation/pdf/HtmlToPdf?url=%2Fsitecore%2Fcontent%2FBoE%2FHome%2Fprudential-regulation%2Fpublication%2F2021%2Fjuly%2Fupdate-on-shareholder-distributions-by-large-uk-banks%3Fpdf%3D1>, accessed, 16.05.22.
152. International Corporate Governance Network (2020) *ICGN Viewpoint: COVID-19 and Executive Remuneration*. London: International Corporate Governance Network. Available from: <https://www.icgn.org/sites/default/files/2021-06/ICGN%20Viewpoint%20COVID-19%20and%20Executive%20Remuneration.pdf>, accessed, 09.03.22.
153. Investment Association (2020) *Executive Remuneration in UK Listed Companies: Shareholder Expectations during the COVID-19 Pandemic (November)*. London: Investment Association. Available from: <https://www.ivis.co.uk/media/13887/remuneration-and-covid-19-for-2021.pdf>, accessed, 09.03.22.
154. Investment Association (2020) *Executive Remuneration in UK listed companies: Shareholder Expectations during the COVID-19 Pandemic (April)*. London: Investment Association. Available from: <https://www.theia.org/sites/default/files/2020-04/Remuneration%20and%20COVID-19.pdf>, accessed, 09.03.22.
155. Department for Business, Energy and Industrial Strategy (2022) *Transparency Data: Bounce Back Loan Scheme Performance Data as at 31 July 2022*. London: Department for Business, Energy and Industrial Strategy. Available from: <https://www.gov.uk/government/publications/covid-19-loan-guarantee-schemes-repayment-data/bounce-back-loan-scheme-performance-data-as-at-31-july-2022>, accessed, 23.11.22.
156. Department for Business, Energy and Industrial Strategy (2022) *View subsidies awarded by UK government*. Available from: <https://searchforuksubsidies.beis.gov.uk/>, accessed, 14.05.22.
157. HM Revenue and Customs (2021) *Employers who have claimed through the Coronavirus Job Retention Scheme*. Available from: <https://www.gov.uk/government/publications/employers-who-have-claimed-through-the-coronavirus-job-retention-scheme>, accessed, 24.02.22.
158. Anon (2020) *Government-backed £35m 'All in, all together' campaign picks up speed*. Available from: https://www.societyofeditors.org/soe_news/goventment-backed-35m-all-in-all-together-campaign-picks-up-speed/, accessed, 07.06.22.
159. Cathcart, B. (2022) 'Government Refuses to Reveal Taxpayer Cost'. *Byline Times*, 08.03. London.
160. Cathcart, B. (2020) 'Millions paid to Corporate Press at the Expense of Journalism'. *Byline Times*, 13.05. London.
161. Anon (2020) '£35m Covid Cash Fund dominated by Big Media while small Publishers struggle'. *Byline Investigates*, 3.06. London.
162. Bank of England (2021) *Commercial Paper held by the CCFF by Business*. London: Bank of England. Available from: <https://www.bankofengland.co.uk/-/media/boe/files/markets/covid-corporate-financing-facility/cp-held-by-ccff-by-business-more-detailed.xlsx>, accessed, 11.08.21.
163. International Accounting Standards Board (2021) *IAS 20 Accounting for Government Grants and Disclosure of Government Assistance*. London: International Financial Reporting Standards Foundation. Available from: <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/ias-20-accounting-for-government-grants-and-disclosure-of-government-assistance.pdf>, accessed, 30.04.22.
164. Financial Reporting Council (2018) *FRS 100 Application of Financial Reporting Requirements*. London: Financial Reporting Council. Available from: [https://www.frc.org.uk/getattachment/498f53a8-2d00-4013-81bf-6e6fa65af4b5/FRS-100-Application-of-Financial-Reporting-Standards-\(March-2018\).pdf](https://www.frc.org.uk/getattachment/498f53a8-2d00-4013-81bf-6e6fa65af4b5/FRS-100-Application-of-Financial-Reporting-Standards-(March-2018).pdf), accessed, 30.04.22.
165. Financial Reporting Council (2022) *FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland*. London: Financial Reporting Council. Available from: [https://www.frc.org.uk/getattachment/0fba8b6a-ff2b-46e2-8c3f-adfc174d300b/FRS-102-\(January-2022\)\(2\).pdf](https://www.frc.org.uk/getattachment/0fba8b6a-ff2b-46e2-8c3f-adfc174d300b/FRS-102-(January-2022)(2).pdf), accessed, 30.04.22.
166. Association of Chartered Certified Accountants (2020) *Technical factsheet: accounting for Covid-19 grants and reliefs*. London: Association of Chartered Certified Accountants. Available from:

- https://www.accaglobal.com/content/dam/ACCA_Global/Technical/fact/tf-CV19-grants1020.pdf, accessed, 12.11.22.
167. Frasers Group PLC (2021) *Annual Report and Accounts 2021*. Shirebrook: Frasers Group PLC.
 168. Frasers Group PLC (2022) *Annual Report and Accounts 2022*. Shirebrook: Frasers Group PLC.
 169. Financial Reporting Council (2018) *FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland*. London: Financial Reporting Council. Available from: [https://www.frc.org.uk/getattachment/69f7d814-c806-4ccc-b451-aba50d6e8de2/FRS-102-FRS-applicable-in-the-UK-and-Republic-of-Ireland-\(March-2018\).pdf](https://www.frc.org.uk/getattachment/69f7d814-c806-4ccc-b451-aba50d6e8de2/FRS-102-FRS-applicable-in-the-UK-and-Republic-of-Ireland-(March-2018).pdf), accessed, 30.04.22.
 170. International Accounting Standards Board (2022) *IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors*. London: International Financial Reporting Standards Foundation. Available from: <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2022/issued/part-a/ias-8-accounting-policies-changes-in-accounting-estimates-and-errors.pdf>, accessed, 30.04.22.
 171. Mitchells & Butlers (2021) *Annual Report and Accounts 2020*. Birmingham: Mitchells & Butlers.
 172. Inchcape (2021) *Annual Report and Accounts 2020*. London: Inchcape.
 173. Inchcape (2022) *Annual Report and Accounts 2021*. London: Inchcape.
 174. IHG Hotels and Resorts (2021) *Annual Report and Form 20-F 2020*. London: IHG Hotels and Resorts.
 175. IHG Hotels and Resorts (2022) *Annual Report and Form 20-F 2021*. London: IHG Hotels and Resorts.
 176. Cineworld Group PLC (2021) *Annual Report and Accounts 2020*. London: Cineworld Group PLC.
 177. CS (Norwich) Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: CS (Norwich) Limited.
 178. Cine-UK Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: Cine-UK Limited.
 179. Cineworld Cinemas Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: Cineworld Cinemas Limited.
 180. City Screen (Brighton) Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: City Screen (Brighton) Limited.
 181. City Screen (Liverpool) Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: City Screen (Liverpool) Limited.
 182. City Screen (Stratford) Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: City Screen (Stratford) Limited.
 183. City Screen (York) Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: City Screen (York) Limited.
 184. CS (Brixton) Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: CS (Brixton) Limited.
 185. CS (Exeter) Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: CS (Exeter) Limited.
 186. Picturehouse Cinemas Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Brentford: Picturehouse Cinemas Limited.
 187. International Accounting Standards Board (2014) *IFRS 9 Financial Instruments*. London: IFRS Foundation. Available from: <https://www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments/#about>, accessed, 20.07.22.
 188. Barclays Bank UK PLC (2022) *Annual Report 2021*. London: Barclays Bank UK PLC.
 189. Barclays Bank UK PLC (2021) *Annual Report 2020*. London: Barclays Bank UK PLC.
 190. Close Brothers Group PLC (2021) *Annual Report 2020*. London: Close Brothers PLC.
 191. Close Leasing Limited (2021) *Annual Report and Financial Statements For the year ended 31 July 2021*. Close Leading Limited.
 192. Close Leasing Limited (2020) *Annual Report and Financial Statements for the year ended 31 July 2020*. Close Leading Limited.
 193. Close Invoice Finance Ltd (2020) *Annual Report and Financial statements for the year ended 31 July 2020*. London: Close Invoice Finance Ltd.

207 The Distributional Impact of COVID-19 Government Support for Business

194. Close Invoice Finance Ltd (2021) *Annual Report and Financial statements for the year ended 31 July 2021*. London: Close Invoice Finance Ltd.
195. HSBC Holdings PLC (2022) *Annual Report and Accounts 2021*. London: HSBC Holdings PLC.
196. HSBC UK Bank PLC (2021) *Annual Report and Accounts 2020*. London: HSBC UK Bank PLC.
197. Investec PLC (2021) *Annual Financial Statements 2021*. London: Investec PLC.
198. Investec PLC (2020) *Annual Report 2020*. London: Investec PLC.
199. Investec Bank PLC (2020) *Annual Report 2020*. Investec Bank PLC.
200. Investec Bank PLC (2021) *Annual Financial Statements 2021*. Investec Bank PLC.
201. Lloyds Banking Group PLC (2022) *Annual Report and Accounts 2021*. London: Lloyds Banking Group PLC.
202. Bank of Scotland PLC (2021) *Annual Report and Accounts 2020*. Edinburgh: Bank of Scotland PLC.
203. Bank of Scotland PLC (2022) *Annual Report and Accounts 2021*. Edinburgh: Bank of Scotland PLC.
204. The Royal Bank of Scotland PLC (2021) *Annual Report and Accounts 2020*. Edinburgh: The Royal Bank of Scotland.
205. The Royal Bank of Scotland PLC (2022) *Annual Report and Accounts 2021*. Edinburgh: The Royal Bank of Scotland.
206. National Westminster Bank PLC (2021) *Annual Reports and Accounts 2020*. London: National Westminster Bank PLC.
207. National Westminster Bank PLC (2022) *Annual Reports and Accounts 2021*. London: National Westminster Bank PLC.
208. Paragon Banking Group PLC (2022) *Annual Report 2021*. Solihull: P.B.G. PLC.
209. Paragon Banking Group PLC (2021) *Annual Report 2020*. Solihull: Paragon Banking Group PLC.
210. TSB PLC (2022) *Annual Report and Accounts 2021 for the year ended 31 December 2021*. Edinburgh: TSB PLC.
211. TSB Bank PLC (2022) *Annual Report and Accounts 2021*. Edinburgh: TSB Bank PLC.
212. TSB PLC (2021) *Annual Report and Accounts 2020 for the year ended 31 December 2020*. Edinburgh: TSB PLC.
213. Virgin Money UK (2021) *Annual Report and Accounts 2021*. Leeds: Virgin Money UK.
214. Virgin Money UK PLC (2020) *Annual Report and Accounts 2020*. Leeds: Virgin Money UK PLC.
215. Funding Circle Focal Point Lending Limited (2021) *Annual Report and Financial Statements for the Period ended 31 December 2020*. London: Funding Circle Focal Point Lending Limited.
216. Funding Circle Focal Point Lending Limited (2022) *Annual Report and Financial Statements for the Period ended 31 December 2021*. London: Funding Circle Focal Point Lending Limited.
217. Funding Circle Holdings PLC (2021) *Annual Report and Accounts 2020*. London: Funding Circle Holding PLC.
218. Funding Circle Holdings PLC (2022) *Annual Report and Accounts 2021*. London: Funding Circle Holding PLC.
219. Coutts and Company (2021) *Annual Report and Accounts*. London: Coutts and Company.
220. Blanes, F., C. de Fuentes, and R. Porcuna (2020) 'Executive Remuneration Determinants: New Evidence from Meta-Analysis'. *Economic research-Ekonomska istraživanja*, **33**(1): 2844-2866.
221. Fama, E.F. and K.R. French (2001) 'Disappearing Dividends: changing Firm Characteristics or lower Propensity to pay?'. *Journal of Financial Economics*, **60**(1): 3-43.
222. Ho, H. (2003) 'Dividend Policies in Australia and Japan'. *International Advances in Economic Research*, **9**(2): 91-100.
223. Al-Najjar, B. and Y. Belghitar (2011) 'Corporate Cash Holdings and Dividend Payments: Evidence from Simultaneous Analysis'. *Managerial and Decision Economics*, **32**(4): 231-241.
224. Al Shabibi, B.K. and G. Ramesh (2011) 'An Empirical Study on the Determinants of Dividend Policy in the UK'. *International Research Journal of Finance and Economics*, **80**(12): 105-124.
225. The Companies (Miscellaneous Reporting) Regulations 2018 (S.I. 2019/860). Available from: https://www.legislation.gov.uk/ukdsi/2018/9780111170298/pdfs/ukdsi_9780111170298_en.pdf, accessed, 24.02.22.

208 The Distributional Impact of COVID-19 Government Support for Business

226. Department for Business, Energy and Industrial Strategy (2018) *Corporate Governance. The Companies (Miscellaneous Reporting) Regulations 2018 Q&A*. London: Department for Business, Energy and Industrial Strategy. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/755002/The_Companies_Miscellaneous_Reporting_Regulations_2018_QA_-_Publication_Version_2_1_.pdf, accessed, 11.05.22.
227. May, T. (2016) *Theresa May – 2016 Speech to Launch Leadership Campaign*. London. Available from: <https://www.ukpol.co.uk/theresa-may-2016-speech-to-launch-leadership-campaign/>, accessed, 03.09.22.
228. Government Equalities Office (2020) *Guidance: Making your gender pay gap calculations*. Available from: <https://www.gov.uk/guidance/making-your-gender-pay-gap-calculations>, accessed, 11.05.22.
229. Government Equalities Office (2020) *Guidance: The gender pay gap data you must gather*. Available from: <https://www.gov.uk/guidance/the-gender-pay-gap-data-you-must-gather#relevant-employees>, accessed, 11.05.22.
230. Associated British Foods PLC (2022) *Annual Report 2021*. London: Associated British Foods PLC.
231. JD Sports Fashion PLC (2021) *Annual Report and Accounts 2021*. Bury: JD Sports Fashion PLC.
232. Mitie Group PLC (2021) *Annual Report and Accounts 2021*. London: Mitie Group PLC.
233. Bodycote PLC (2020) *Annual Report 2019*. Macclesfield: Bodycote PLC.
234. Bodycote PLC (2021) *Annual Report 2020*. Macclesfield: Bodycote PLC.
235. John Wood Group PLC (2021) *Annual Report and Accounts 2020*. Aberdeen: John Wood Group PLC.
236. High Pay Centre (2022) *High Pay Centre Analysis of FTSE 350 Pay Ratios*. London: High Pay Centre. Available from: https://highpaycentre.org/wp-content/uploads/2022/05/STA0422803002-001_aFFT-Pay-Ratios-Report_0522_FINAL_v4.pdf, accessed, 05.06.22.
237. Rentokil Initial PLC (2021) *Annual Report 2021*. Crawley: Rentokil Initial PLC.
238. Flutter Entertainment PLC (2021) *Annual Report and Accounts 2020*. Dublin: Flutter PLC.
239. International Airlines Group SA (2022) *Annual Report and Accounts 2021*. London: International Airlines Group SA.
240. Mondi Group PLC (2021) *Integrated Report and Financial Statements 2020*. Weybridge: Mondi Group PLC.
241. Ferguson PLC (2022) *Annual Report and Accounts 2021*. Wokingham: Ferguson PLC.
242. Halma PLC (2021) *Annual Report and Accounts 2021*. Amersham: Halma PLC.
243. IWG PLC (2021) *Annual Report and Accounts 2020*. Zug: IWG PLC.
244. Croda International PLC (2022) *Annual Report and Accounts 2021*. Snaith: Croda International PLC.
245. C&C Group PLC (2022) *Annual Report 2022*. Dublin: C&C Group PLC.
246. BHP PLC (2021) *Annual Report 2021*. Melbourne: BHP PLC.
247. Codd, F. and D. Ferguson (2021) *Fire and re-hire tactics*. London: House of Commons Library. Available from: <https://researchbriefings.files.parliament.uk/documents/CDP-2021-0066/CDP-2021-0066.pdf>, accessed, 06.08.22.
248. Sharp, T. (2021) *Fire and Rehire Tactics are levelling down Pay* London: Trades Union Congress. Available from: <https://www.tuc.org.uk/blogs/fire-and-rehire-tactics-are-levelling-down-pay>, accessed, 06.08.22.
249. Hebditch, J. (2020) 'Bosses at posh Edinburgh hotel The George blasted for re-opening month after hundreds of staff axed'. *Daily Record*, 23.07.
250. Powley, T. (2020) 'Thousands of British Airways staff braced for job cuts'. *Financial Times*, 7.08.
251. Business, Energy and Industrial Strategy Committee (2021) *Oral evidence: The Impact of Coronavirus on Businesses and Workers, HC 219, 2 February 2021*. London: House of Commons. Available from: <https://committees.parliament.uk/oralevidence/1639/pdf/>, accessed, 07.09.22.
252. PWC (2020) *UK Hotels Forecast 2020-2021*. London: PWC. Available from: <https://image.uk.info.pwc.com/lib/fe31117075640475701c74/m/2/487fcd4b-516c-4679-8844-cef76bfd1e3c.pdf>, accessed, 13.09.22.

209 The Distributional Impact of COVID-19 Government Support for Business

253. American Hotel and Lodging Association (2020) *Survey of Hotels on the Financial Crisis*. Washington D.C.: American Hotel and Lodging Association. Available from: <https://www.ahla.com/sites/default/files/AHLA%20Front%20Desk%20Feedback%20Survey%20Results%2011.18.20.pdf>, accessed, 13.09.22.
254. Wu, E.H.C., J. Hu, and R. Chen (2022) 'Monitoring and forecasting COVID-19 Impacts on Hotel Occupancy Rates with Daily Visitor Arrivals and Search Queries'. *Current Issues in Tourism*, **25**(3): 490-507.
255. Sharma, A. and J.L. Nicolau (2020) 'An Open Market Valuation of the Effects of COVID-19 on the Travel and Tourism Industry'. *Annals of Tourism Research*, **83**: 102990.
256. Hancock, A. (2020) 'IHG set to cut jobs as it falls to \$275m loss'. *Financial Times*, 11.08. London.
257. IHG Hotels and Resorts (2020) *Annual Report and Form 20-F 2019*. London: IHG Hotels and Resorts.
258. Anon (2022) *Personal Communication with Unite the Union*. G. Fooks, 14.10, Southampton.
259. Anon (2020) 'Coronavirus: Jobs under threat at five Scottish hotels'. *BBC*, 04.06. London.
260. Hay, K. (2020) 'Hotel group to make redundancies at Edinburgh chains including Kimpton and The George'. *Edinburgh Evening News*, 3.06. Edinburgh.
261. Haugh, J. (2020) 'Unite hit out at Blythswood and Grand Central plans to cut 380 jobs'. *Glasgow Evening Times*, 19.06. Glasgow.
262. Galloway, C. (2021) 'Luxury Edinburgh hotel blasted over 'mass fire and rehire' tactic amid pandemic'. *Edinburgh Live*, 27.04. Edinburgh.
263. Brady, A. (2021) *Hotel workers say no to 'fire and re-hire'*. Available from: <https://unitelive.org/hotel-workers-say-no-to-fire-and-re-hire/>, accessed, 22.09.22.
264. Unite (2021) *Unite Submission to The Low Pay Commission Consultation on Increasing the Minimum Wage*. London: Unite. Available from: <https://www.politicshome.com/ugc-1/1/36/0/unite-submission-to-the-low-pay-comm.pdf>, accessed, 14.10.22.
265. McDonald, S. (2020) *Letter to Chancellor of the Exchequer, Rushi Sunak*. On file with author.
266. Vinod, B. (2020) 'The COVID-19 Pandemic and Airline Cash Flow'. *Journal of Revenue and Pricing Management*, **19**(4): 228-229.
267. Maneenop, S. and S. Kotcharin (2020) 'The Impacts of COVID-19 on the Global Airline Industry: An Event Study Approach'. *Journal of Air Transport Management*, **89**: <https://doi.org/10.1016/j.jairtraman.2020.101920>.
268. Dube, K., G. Nhamo, and D. Chikodzi (2021) 'COVID-19 Pandemic and Prospects for Recovery of the Global Aviation Industry'. *Journal of Air Transport Management*, **92**: <https://doi.org/10.1016/j.jairtraman.2021.102022>.
269. Bouwer, J., et al. (2022) *Taking Stock of the Pandemic's Impact on Global Aviation*. Amsterdam: McKinsey and Company. Available from: <https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/taking-stock-of-the-pandemics-impact-on-global-aviation>, accessed, 15.09.22.
270. Sobieralski, J.B. (2020) 'COVID-19 and Airline Employment: Insights from Historical Uncertainty Shocks to the Industry'. *Transportation Research Interdisciplinary Perspectives*, **5**: <https://doi.org/10.1016/j.trip.2020.100123>.
271. Organization for Economic Co-Operation and Development (2020) *COVID-19 and the Aviation Industry: Impact and Policy Responses*. Paris: OECD. Available from: https://read.oecd-ilibrary.org/view/?ref=137_137248-fyh10sbu89&title=COVID-19-and-the-aviation-industry, accessed, 15.09.22.
272. International Air Transport Association (2020) *Air Passenger Market Analysis*. Montreal: International Air Transport Association. Available from: <https://www.iata.org/en/iata-repository/publications/economic-reports/air-passenger-monthly-analysis---apr-2020/>, accessed, 15.09.22.
273. Georgiadis, P. (2021) 'British Airways owner records biggest ever loss'. *Financial Times*, 26.02. London.

210 The Distributional Impact of COVID-19 Government Support for Business

274. Hollinger, P. (2020) 'British Airways secures state backing for £2bn loan'. *Financial Times*, 31.12. London.
275. International Airlines Group SA (2021) *Annual Report and Accounts 2020*. London: International Airlines Group SA.
276. British Airways PLC (2021) *Annual Reports and Accounts Year ended 31 December 2020*. London: British Airways PLC.
277. British Airways PLC (2022) *Annual Reports and Accounts Year ended 31 December 2021*. London: British Airways PLC.
278. Powley, T. and G. Parker (2020) 'British Airways to cut up to 12,000 jobs as aviation outlook darkens'. *Financial Times*, 29.04.
279. House of Commons Transport Committee (2020) *The Impact of the Coronavirus Pandemic on the Aviation Sector. Second Report of Session 2019–21*. London: House of Commons. Available from: <https://committees.parliament.uk/publications/1452/documents/13275/default/>, accessed, 06.08.22.
280. Powley, T. (2020) 'British Airways cabin crew union warns of strike over job cuts'. *Financial Times*, 28.07. London.
281. Unite (2022) *BA make increased pay offer for check-in staff, dispute suspended as union members go to ballot*. London: Unite. Available from: <https://www.unitetheunion.org/news-events/news/2022/july/ba-make-increased-pay-offer-for-check-in-staff-dispute-suspended-as-union-members-go-to-ballot/>, accessed, 17.09.22.
282. Kollewe, J. (2022) 'Heathrow faces summer of disruption as BA staff vote to strike'. *The Guardian*, 23.06. London.
283. Unite (2022) *British Airways facing summer turmoil as check in staff vote overwhelmingly for strikes over pay*. London: Unite. Available from: <https://www.unitetheunion.org/news-events/news/2022/june/british-airways-facing-summer-turmoil-as-check-in-staff-vote-overwhelmingly-for-strikes-over-pay/#:~:text=strikes%20over%20pay-,British%20Airways%20facing%20summer%20turmoil%20as%20check%20in,overwhelmingly%20for%20strikes%20over%20pay&text=Workers%20employed%20as%20check%20in,in%20a%20dispute%20over%20pay>, accessed, 17.09.22.
284. Unite (2022) *British Airways' passengers warned of major delays as workers ballot for pay strikes*. London: Unite. Available from: <https://www.unitetheunion.org/news-events/news/2022/may/british-airways-passengers-warned-of-major-delays-as-workers-ballot-for-pay-strikes/#:~:text=for%20pay%20strikes-,British%20Airways'%20passengers%20warned%20of%20major%20delays,workers%20ballot%20for%20pay%20strikes&text=Unite%2C%20the%20UK's%20leading%20union,in%20a%20dispute%20over%20pay>, accessed, 30.05.22.
285. Unite (2022) *British Airways check-in dispute over as workers accept significant pay offer*. London: Unite. Available from: <https://www.unitetheunion.org/news-events/news/2022/july/british-airways-check-in-dispute-over-as-workers-accept-significant-pay-offer/>, accessed, 17.10.22.
286. Georgiadis, P. and D. Strauss (2022) 'British Airways strike called off after new pay offer'. *Financial Times*, 08.07. London.
287. Unite (2021) *Unite boss slams bad faith British Airways as airline moves to bring in more lower paid cabin crew*. London: Unite. Available from: <https://www.unitetheunion.org/news-events/news/2021/october/unite-boss-slams-bad-faith-british-airways-as-airline-moves-to-bring-in-more-lower-paid-cabin-crew/>, accessed, 17.09.22.
288. Georgiadis, P. (2021) 'BA to rehire some of thousands of staff laid off during pandemic'. *Financial Times*, 6.10.
289. Hollinger, P. and T. Powley (2020) 'BA pilots to vote on pay and redundancy package'. *Financial Times*, 23.07. London.
290. Gardiner, L. and H. Slaughter (2020) *The effects of the Coronavirus Crisis on Workers*. London: Resolution Foundation. Available from:

211 The Distributional Impact of COVID-19 Government Support for Business

<https://www.resolutionfoundation.org/app/uploads/2020/05/The-effect-of-the-coronavirus-crisis-on-workers.pdf>, accessed, 11.05.22.

291. Papoutsaki, D. and T. Wilson (2020) *Covid-19 and the Low Paid: early Analysis of Labour Force Survey*. London: Institute of Employment Studies. Available from: https://www.employment-studies.co.uk/system/files/resources/files/IES%20briefing%20-%20Covid-19%20and%20the%20low%20paid%20FINAL2_0.pdf, accessed, 11.05.22.
292. Genuit Group PLC (2021) *Annual Report and Accounts 2020*. Leeds: Geniut PLC.
293. Cineworld Group PLC (2022) *Annual Report and Accounts 2021*. London: Cineworld Group PLC.
294. Cineworld Group PLC (2020) *Annual Report and Accounts 2019*. London: Cineworld Group PLC, accessed, 11.05.22.
295. HM Revenue and Customs (2020) *Guidance: Calculate how much you can claim using the Coronavirus Job Retention Scheme* London: HMRC. Available from: <https://www.gov.uk/guidance/calculate-how-much-you-can-claim-using-the-coronavirus-job-retention-scheme#work-out-80-of-your-employees-usual-wage>, accessed, 30.10.2021.
296. Blythwood Square Hotel Glasgow Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Buckinghamshire: Blythwood Square Hotel Glasgow Limited.
297. Edinburgh George Street Hotel OPCO Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Buckinghamshire: Edinburg George Street Hotel OPCO Limited.
298. Grand Central Glasgow Hotel OPCO Limited (2021) *Annual Report and Accounts for the year ended 31 December 2020*. Buckinghamshire: Grand Central Glasgow Hotel OPCO Limited.
299. Manchester Oxford St Hotel OPCO Limited (2021) *Annual Report and Accounts for the year ended 31 December 2021*. Buckinghamshire: Manchester Oxford St Hotel OPCO Limited.
300. Met Leeds Hotel OPCO Limited (2021) *Annual Report and Accounts for year ending 31 December 2021*. Buckinghamshire: Met Leeds Hotel OPCO Limited.
301. Oxford Spires Hotel OPCO Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Buckinghamshire: Oxford Spires Hotel OPCO Limited.
302. Oxford Thames Hotel OPCO Limited (2021) *Annual Report and Accounts*. Buckinghamshire: Oxford Thames Hotel OPCO Limited.
303. Roxburghe Hotel Edinburgh OPCO Limited (2021) *Annual Report and Accounts for the year ended 31 December*. Buckinghamshire: Roxburghe Hotel Edinburgh OPCO Limited.
304. Russell London Hotel OPCO Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Buckinghamshire: Russell London Hotel OPCO Limited.
305. St David's Cardiff Hotel OPCO Limited (2021) *Annual Report and Financial Statements for the year ended 31 December 2020*. Buckinghamshire: St David's Cardiff Hotel OPCO Limited.
306. The Grand Central Hotel Glasgow Limited (2021) *Annual Report and Accounts for the year ended 31 December 2020*. Buckinghamshire: The Grand Central Hotel Glasgow Limited.
307. The Met Hotel Leeds Limited (2021) *Annual Reports and Accounts for year ending 31 December 2020*. The Met Hotel Leeds Limited: The Met Hotel Leeds Limited.
308. The Principal Edinburgh George Street Limited (2021) *Annual Report and Accounts for the year ended 2020*. Buckinghamshire: The Principal Edinburgh George Street Limited.
309. The Principal London Limited (2021) *Annual Report and Accounts for year ending 31 December 2020*. Buckinghamshire: The Principal London Limited.
310. The Principal Manchester Limited (2021) *Annual Report and Accounts for year ending 31 December 2020*. Buckinghamshire: The Principal Manchester Limited.
311. The Principal York Limited (2021) *Annual Report and Accounts for the year ended 31 December 2020*. Buckinghamshire: The Principal York Limited.
312. The Roxburghe Hotel Edinburgh Limited (2021) *Annual Reports and Accounts for the year ended 31 December 2020*. Edinburgh: The Roxburghe Hotel Edinburgh Limited.
313. The Wotton House Hotel OPCO Limited (2021) *Annual Report and Accounts for the year ended 31 December*. Buckinghamshire: The Wotton House Hotel OPCO Limited.

212 The Distributional Impact of COVID-19 Government Support for Business

314. York Station Road Hotel OPCO Limited (2021) *Annual Report and Accounts for the year ended 31 December*. Buckinghamshire: York Station Road Hotel OPCO Limited.
315. Kaźmierska-Jóźwiak, B. (2015) 'Determinants of Dividend Policy: Evidence from Polish Listed Companies'. *Procedia Economics and Finance*, **23**: 473-477.
316. van Essen, M., J. Otten, and E.J. Carberry (2015) 'Assessing Managerial Power Theory: a Meta-Analytic Approach to Understanding the Determinants of CEO Compensation'. *Journal of Management*, **41**(1): 164-202.
317. Finkelstein, S. and D.C. Hambrick (1989) 'Chief Executive Compensation: a Study of the Intersection of Markets and Political Processes'. *Strategic Management Journal*, **10**(2): 121-134.