



Handelshøyskolen BI

GRA 19703 Master Thesis

Thesis Master of Science 100% - W

Predefinert informasjon

Startdato:	09-01-2023 09:00 CET	Termin:	202310
Sluttdato:	03-07-2023 12:00 CEST	Vurderingsform:	Norsk 6-trinns skala (A-F)
Eksamensform:	T		
Flowkode:	202310 11184 IN00 W T		
Intern sensor:	(Anonymisert)		

Deltaker

Navn:

Informasjon fra deltaker

Tittel *:	An Analysis of the Financial Performance of Companies Rated Best Places to Work Compared to the Market Index: A Comparative Study Pre and Post Covid-19
Navn på veileder *:	Ella Getz Wold

Inneholder besvarelsen konfidensielt materiale?:	Nei	Kan besvarelsen offentliggjøres?:	Ja
---	-----	--	----

Gruppe

Gruppenavn:	(Anonymisert)
Gruppenummer:	196
Andre medlemmer i gruppen:	

Master Thesis

An Analysis of the Financial Performance of Companies Rated Best Places to Work Compared to the Market Index: A Comparative Study Pre and Post Covid-19

by

Sarah Aouanouk and Isabella Caspari

MSc in Finance

Supervised by

Ella Getz Wold

ABSTRACT

This thesis investigates the performance of companies ranked on Glassdoor's UK Best Places to Work list from 2017 to 2022, with a particular focus on the impact of the Covid-19 pandemic. By analysing this recent period, we aim to capture current market developments and trends. Incorporating a dummy variable for the post-Covid era, our regression analysis assesses the influence of the pandemic on stock returns and evaluates the changing landscape of employee well-being and work practices. To ensure the robustness of our findings, we compare the performance of the BPTW portfolio against a control group drawn from the S&P 500. Control variables such as company size, sector classification, and age are considered to isolate the specific impact of being recognized as a BPTW company on financial performance. Through our research, we aim to contribute to the literature by shedding light on the relationship between BPTW companies, stock returns, and the evolving dynamics of the workplace in the context of the Covid-19 pandemic. The main research question addressed is; *Do stocks from the BPTW portfolio perform better than a market benchmark post-Covid?* By examining the returns of different portfolios, we aim to uncover the significance of the BPTW portfolio during the pandemic. We find that overall, these results demonstrate that being listed on the Best Places to Work (BPTW) has a significant positive impact on daily returns.

Key words : ESG, employee satisfaction, financial performance, Covid-19

Acknowledgments

We would like to thank our supervisor Ella Getz Wold for her support, guidance and insights through this process.

Table of Contents

1. INTRODUCTION.....	1
2. BACKGROUND AND LITERATURE	3
3. TESTABLE HYPOTHESES	8
4. METHODOLOGY	9
4.1. Time-series regression	9
4.2. Panel-data regression	9
4.3 Variables	10
4.3.1 Explanatory Variable – Daily Returns	10
4.3.2 Dependent Variable - Best Place to Work Ranking (BPTW)	11
4.3.3 Control Variables	12
4.5. Hypothesis.....	15
5. DATA AND VARIABLES.....	15
5.1 Data Collection	15
5.2 Sample Construction.....	16
5.3 Descriptive Statistics.....	17
6. RESULTS.....	18
6.1. Hypothesis 1 - BPTW Against a Market Benchmark.....	18
6.2. Hypothesis 2 - The Effect of Covid-19.....	21
7. CONCLUSION	24
7.1 Main Findings and Implications	24
7.2 Limitations and Further Research.....	25
APPENDIX	28
BIBLIOGRAPHY	35

1. INTRODUCTION

In an article for Forbes magazine, Benjamin Laker stated “Culture is a Company's single most powerful advantage”. The article continues to elaborate on how companies with strong cultures have seen a four times increase in revenue growth. Furthermore, companies that have appeared on Fortune’s annual 100 Best Companies to Work For list also saw higher average annual returns, with cumulative returns as high as 495% instead of 170% (Russell 3000) and 156% (S&P 500) (Laker, 2021). This statement and the related findings on the weight company culture has in the corporate world are the inspiration for this thesis. Historically there are conflicting opinions as to whether employee welfare is beneficial for the companies’ financial performance.

Professor Alex Edmans discusses how, following traditional theories on company value, such as Principal Agent Theory and Taylorism (Taylor, 1911), companies focused on cost efficiency to extract the maximum output while minimising their cost. Employees were also considered a cost (Edmans, 2011). More recent publications show how the role of employees in the corporate world has changed dramatically over this past century with factors like environmental issues, social issues, and governance (ESG) becoming more prominent.

Through the mid 20th century research began to appear, reflecting how employees could be considered more as vital organisational assets than replaceable resources, capable of generating significant value through for example, product innovation and cultivation of strong client connections. In 1983, Organ and Bateman explored the relationship between job satisfaction and employee citizenship behaviours, emphasising the positive impact of satisfied employees on organisational outcomes.

These theories advocated that employee satisfaction can enhance both retention and motivation, ultimately benefiting shareholders (Organ & Bateman, 1983). More recently, researchers have found that investing in employee welfare has a positive impact on a company's performance and shareholder value (Albuquerque et al., 2019). To quantify employee welfare, several employee satisfaction sites have appeared. Researchers have used this data to study the relationship between employee satisfaction and equity returns. Work by Symitsi,

Stamolampros, & Daskalakis (2018) used an extensive dataset of employees' online reviews for U.S. public companies posted on Glassdoor, one of the world's largest job and recruiting sites, and found a statistically significant positive association between average employee satisfaction rating and corporate performance.

As we move on from Covid-19, many are realising the value of work-life balance or more closely the benefits of a flexible work-day combined with the value of good company culture. Dr Yemisi Bolade-Ogunfodun argues that “The moment of truth for many organisations has been revealed in how employers express the culture in supportive attitudes to employees, in initiatives developed to cushion the adverse effects of the pandemic and in living out their core values; in other words, “walking the talk,”” (Laker, 2021). A study by Shan et al., (2022) on employee satisfaction, highlighted the impact that the Covid-19 pandemic had on company culture. Their study showed that high employee satisfaction could be materialised during negative shocks.

This thesis aims to investigate whether this recent shift of mentality is being adopted by corporations and being reflected in their returns. Furthermore, whether companies considered a Best Place to Work on recruiting site, Glassdoor, outperform their peers financially. Do companies that score well on employee welfare offer protection against market disturbances such as the one we experienced during the Covid-19 pandemic? Factors that could potentially influence the relationship between company culture and financial performances such as sector, company size and revenue will also be considered. In order to test the hypothesis, see Section 3, the BPTW portfolio will be compared to a market portfolio. A portfolio of randomly selected stocks from the S&P 500 is created as a control group through the same period. Findings of these portfolio returns are presented in Figure 1.



Figure 1-Total Returns of BPTW Portfolio against the Market and Market Control Group¹

From the graph it seems clear that the Best Places to Work Portfolio outperforms the market portfolio based on their returns. However, to understand what contributes to these returns, the BPTW portfolio is assessed through regression analysis.

2. BACKGROUND AND LITERATURE

For the last decade, the world has been focusing on ESG topics, forcing not only governments but companies, their managers and shareholders to challenge their role as players in the world. While researching employee satisfaction and company value, we found several studies that have investigated this link. Although it might appear natural that employee satisfaction would enhance company performance, some of the conventional theories discussed in the introduction propose the opposite relationship.

Indeed in 1995, John Diltz studied the impact of social screening on portfolio performance by comparing them to conventional portfolios. The aim of this study was to examine whether accounting for social criteria in the investment process affected the financial performances of the portfolios. Diltz found that the excess returns had no correlations with the Council of Economic Priorities' (CEP), a public service research organization, minority management and

¹ The large yearly dips represent the day the new BPTW ranking is released and the portfolio is updated

women in management variables (Diltz,1995). Furthermore, Gorton and Schmid (2004) examined the effects of co-determination on companies' performances, accounting for productivity, profitability, and investment decisions in Germany. Co-determination refers to the practice of including employee representatives in corporate decision-making processes. They found both positive and negative impacts on the companies' outcomes (Gorton & Schmid, 2004).

On the one hand, co-determination was found to increase employee satisfaction and productivity while reducing labour disputes. However, co-determination also leads to a reduction in profitability and valuation for companies. Overall, these studies provide insights into the effects of social responsibility in companies, demonstrating its potential benefits but also limitations on various company outcomes. Additionally, they display the complexity of corporate governance. These findings arguably reflect the view taken by the traditional investor, trying to balance employee satisfaction and shareholder value.

In contrast, more recent theories investigating the significance of employee satisfaction have gained substantial recognition as companies seek to maximise not only work productivity, but also retention of talent in the workforce. The increasing importance given to employee satisfaction is closely intertwined with the rise of crowdsourced employer reviews, such as Glassdoor. Job seekers now have unprecedented access to real-time insights and first-hand accounts of what it's like to work for a particular company. Employers, on the other hand, have begun to view these crowdsourced reviews as valuable feedback tools with the potential to affect their reputation.

In 2011 Alex Edmans found that companies on Fortune's list of "100 Best Companies To Work for in America", significantly outperformed the overall market in recent years. Two-thirds of the data used in this article come from employee responses to a 57-question survey created by the Great Place to Work Institute in San Francisco. The remaining one-third of the score come from the Institution's evaluation of factors such as a companies' demographic makeup, pay and benefits programs, and culture. Edmans investigated whether the stock market accurately reflects the value of intangible assets, such as employee satisfaction, in determining stock prices and long-term returns. Edmans concluded that companies with higher levels of employee

satisfaction tend to have higher stock prices, indicating that the stock market partially incorporates the value of intangibles (Edmans, 2011). However, Edmans notes that we should account for the market possibly not fully capturing the intangibles entire value, suggesting that there may omitted variable bias. Overall, the research highlights the importance of considering intangible assets, such as employee satisfaction, in the investment decision-making process. It suggests that companies with higher employee satisfaction may possess hidden value that is not fully reflected in their stock prices, presenting potential opportunities for investors who recognize and incorporate these intangibles into their investment strategies.

Similarly, in 2015 Glassdoor performed its own study using their own ranking of “Best Places to Work in America” to investigate the relationship between company culture and financial performance in the short-term (Chamberlain, 2015). They build on this report in 2020 by providing the first systematic analysis of stock returns for the full list of publicly traded U.S. companies appearing on Glassdoor’s “Best Places to Work” list from 2009 until 2019. They argue that a positive culture can lead to improved employee satisfaction, which can in turn lead to higher productivity and profitability (Chamberlain & Munyika, 2019). Creating an equally weighted portfolio based on the 134 publicly traded companies, Glassdoor compared its returns to the benchmark index, S&P 500. They found that companies with strong cultures as determined by Glassdoor's "Best Places to Work" list, significantly outperformed the control group.

Furthermore, researchers at University of East Anglia in Norwich, UK studied the relationship between employee satisfaction and long-run equity returns using an extensive dataset of employees’ online reviews for U.S. public companies posted on Glassdoor over seven years (2009–2016). The authors find a statistically significant positive association between average employee satisfaction rating and corporate performance, specifically return on assets (ROA) and Tobin's q (Symitsi, Stamolampros, & Daskalakis, 2018). Their findings remained robust even after controlling for company characteristics; review volume, industry, and time fixed effects. Moreover, the study examined the performance of portfolios that included stocks of the best-rated companies based on employee satisfaction. Over the eight-year period, the value-weighted portfolio yielded an average monthly four-factor alpha of 1.35%. The equally

weighted portfolio generates higher abnormal returns compared to using different asset pricing models and when considering review volume in constructing the portfolios.

The authors make three main contributions to the literature. First, their findings support the human capital-centred view of the company, emphasising the importance of employees as valuable assets contributing to company value through innovation and customer relationships. Second, the study suggests that employee satisfaction can serve as a good predictor of a company's financial results and has value-relevance for investors, highlighting the significance of non-financial indicators in security valuation. Finally, the portfolio analysis indicates that employee satisfaction is not fully incorporated by the market, as investing in companies with high levels of employee satisfaction results in statistically and economically significant abnormal returns.

Symitsi et al., differentiate their study from previous research by utilising employees' online reviews instead of relying on Fortune's "100 Best Companies to Work for in America" list. This approach overcomes limitations associated with self-selection bias and the restricted sample size and frequency of the Fortune list. In conclusion, the article demonstrates a positive relationship between employee satisfaction and long-run equity returns and highlights the potential undervaluation of employee satisfaction in the stock market. This again emphasises the value of incorporating non-financial indicators in investment decision-making processes.

Other recent studies have also found that companies who experience improvements in crowdsourced employer ratings significantly outperform companies with declines (Green et al., 2018). The researchers examine the impact of employee reviews on Glassdoor, a popular platform for workplace reviews, on the stock performance of companies. Their findings suggest that employee reviews on Glassdoor can provide valuable information for investors. The researchers observe that companies with higher employee ratings and positive reviews tend to experience higher future stock returns. Conversely, companies with lower ratings and negative reviews tend to exhibit lower future stock returns.

The outbreak of the pandemic led to an abrupt challenge to the global economy, causing significant disruptions and volatility in financial markets. Amid the pandemic, employee satisfaction has emerged as a critical factor influencing company performance and,

subsequently, stock market dynamics. With strict lockdowns and social distancing measures in place, many employees were forced to work from home, blurring the lines between personal and professional lives. Research studies have examined how fluctuations in employee satisfaction levels translate into changes in company performance and subsequent impacts on stock prices.

Shan and Tang (2022) investigated the impact of employee satisfaction on company performance during the Covid-19 pandemic. They analysed data from companies across various industries and examined the relationship between employee satisfaction levels and financial outcomes during the pandemic. The findings suggest that companies with higher employee satisfaction prior to the pandemic tend to exhibit better financial performance and resilience during the crisis (Shan & Tang, 2022). The evidence regarding the performance of companies with different levels of environmental, social, and governance (ESG) practices during crisis periods is inconclusive. One perspective presented by Bansal et al. (2021) argues that companies without any negative ESG incidents, often referred to as "good" stocks, generate lower abnormal returns compared to companies with ESG incidents, known as "bad" stocks, during economic downturns. These divergent findings highlight the complex nature of the relationship between ESG performance and company outcomes during crisis periods. On the other hand, Albuquerque et al. (2020) and Ding et al. (2021) find that companies with better ESG ratings had higher stock returns during Covid-19. Could that be the case if the group of companies studied were ranked on the Best Places to Work Glassdoor's Ranking?

This thesis aims to assess whether the "Best Places to Work" stocks also have a greater return than the market when extending the sample to the end of 2022 and whether there has been any significance of the BPTW stocks in the post-Covid era. The effect of other control variables on the stock returns will also be assessed. Additionally, the data will be measured against a control group based on the S&P 500 benchmark. The findings of the studies above contribute to the rationale for choosing Glassdoor as the starting point for the analysis in this thesis. As Green et al.'s study was done prior to the pandemic, one can question how the outcome of this study could change when accounting for the impact of Covid-19. Overall, the aim is to draw on methods from both studies by using Glassdoor's methodology and ranking data while controlling for omitted variable bias. This will be done by adding additional variables including sector, number of employees, age and company revenue.

3. TESTABLE HYPOTHESES

This thesis aims to investigate the performance of Best Places to Work (BPTW) companies in the UK from 2017 to 2022. In addition to studying the financial performance of BPTW companies, the thesis will focus on the impact of the Covid-19 pandemic. This unprecedented event has not only affected stock returns but also brought significant changes to employee welfare and the way we work. By incorporating a dummy variable for the post-Covid period into the regression analysis, the influence on stock returns can be assessed. To ensure the robustness of the findings, the performance of the BPTW portfolio is compared against a market benchmark. In this case the S&P 500 will function as a control group. Furthermore, control variables such as company size, sector classification, age and revenue are considered to isolate the specific impact of being recognized as a BPTW company on financial performance. This research aims to shed light on the relationship between BPTW companies, stock returns, and the evolving dynamics of the workplace in the context of the Covid-19 pandemic. The analysis considers the changing landscape of employee welfare and the implications for financial performance in the UK market. Based on the theory presented above, the main research question is presented as follows;

Do stocks from the BPTW portfolio perform better than a market benchmark post-Covid?

In order to answer the research question, the investigation is divided into three stages. First, do stocks from the BPTW portfolio perform better than a market benchmark? Second, do stocks from the BPTW portfolio perform better than a market benchmark when controlling for company characteristics? Finally, the main hypothesis: do stocks from the BPTW portfolio perform better than a market benchmark when controlling for firm characteristics in the post-Covid era?

The final hypothesis may be written out as follows:

H0: Companies ranked BPTW outperform the market more post-Covid

HA: Companies ranked BPTW do not outperform the market more post-Covid

4. METHODOLOGY

This section focuses on the structure and models used to answer the research question. In section 4.1 the time-series methodology is presented. Section 4.2 discusses the panel data methodology. All variables (dependent, independent and control) are defined in section 4.3. Finally, in section 4.4 the formal null and alternative hypotheses are reiterated.

4.1. Time-series regression

To test the hypothesis that BPTW companies outperform the market benchmark, an S&P 500 control group, time-series regression analysis is used when the dataset consists of daily returns for both the treatment group, the BPTW companies, and the control group, the randomly selected S&P 500 companies,. Time-series regression allows analysis of the relationship between variables over time and capture the dynamics within the dataset. Time-series regression analysis is commonly used in finance and econometrics research to investigate the impact of various factors on financial performance. By examining the daily returns of the treatment and control groups, the relative performance of BPTW companies compared to the market benchmark and control group over time can be assessed. It is also important to consider the assumptions and limitations of time-series regression, such as the presence of autocorrelation, heteroscedasticity, and stationarity.

4.2. Panel-data regression

Panel data regression methodology is employed to investigate the influence of company characteristics on the financial performance of BPTW companies. It allows for simultaneous analysis of cross-sectional and time-series variations, controlling for individual heterogeneity and capturing the dynamic nature of the data. Extensive academic literature supports its use in analysing company characteristics and their relationship with financial performance.

By incorporating panel data regression, addressing omitted variable bias, and utilising dummy variables, a robust analysis of company characteristics and their impact on financial performance can be ensured.

Omitted variable bias is a concern in statistical analysis where relevant variables are unintentionally excluded from the model, leading to biased and misleading outcomes. This bias arises when the omitted variable is correlated with both the dependent and included independent variables, distorting the estimated relationship. To address this bias, we must carefully consider and include all relevant variables in the analysis, employing techniques such as instrumental variables or panel data analysis to account for potential omitted variables.

In regression analysis, dummy variables are useful in testing for significance, allowing the inclusion of categorical variables like the post-Covid time period and checking for sector fixed effects. Dummy variables take values of 1 or 0 to represent the presence or absence of a specific category.

4.3 Variables

In the analysis, the impact of various firm characteristics on the financial performance of BPTW companies are investigated, while also examining the influence of the Covid-19 pandemic. A panel data regression approach is employed to capture both cross-sectional and time-series variations in the data, allowing us to control for individual heterogeneity and account for the dynamic nature of the dataset.

4.3.1 Explanatory Variable – Daily Returns

The dependent variable in our analysis is daily returns, which serves as a measure of the overall performance of both the BPTW companies and a randomly selected group of S&P 500 companies. It represents the daily returns of the companies included in our dataset. Daily returns are calculated as;

$$r_j = \frac{P_{t+1} - P_t}{P_t}$$

r_j = Daily return on a stock j

P_t = Adjusted Closing Price of the stock at time t

P_{t+1} = Adjusted Closing Price of the stock at time $t + 1$

This variable is of primary interest in seeking to understand its relationship with the BPTW variable. To explore this relationship, several control variables that represent key company characteristics are included. As the research is conducted taking the view of the Investor looking to place their money in a portfolio which is more rewarding than the market index, given their risk profile, it was necessary to choose a comparative benchmark.

The S&P 500 is widely considered one of the most common market benchmarks to compare one's own performance to. Additionally, most stocks listed on the Best Place to Work list, list the Head Quarters in the United States. As such the S&P 500 was deemed to be the most appropriate benchmark. To compare its performance to the portfolios, a control group was created from S&P 500. To construct the control group, a random sample of 89 unique stocks from the S&P 500 was selected, from which we create six random portfolios, consisting of the same number of stocks as the BPTW Portfolio for each year. The control group portfolios are held for the same period as the BPTW Portfolio.

4.3.2 Dependent Variable - Best Place to Work Ranking (BPTW)

The first characteristic to be included is the Glassdoor Ranking on the Best Place to Work list. The variable, named BPTW in the regression model, functions as a dummy variable where the stock is either 1 if on the Glassdoor list, and 0 if not on the list. It allows for comparison of the daily returns of ranked companies with those that are not ranked. To be eligible for the 50 Best Places to Work, UK, Glassdoor describes their requirements as: At least 30 ratings across the nine workplace attributes from UK based employees; at least 1,000 employees at the end of the eligibility time frame. For all categories, an employer must have at least a 3.5, out of 5, overall company rating on Glassdoor and workplace factor ratings² of at least 2.5, out of 5, during the eligibility period. Glassdoor's proprietary awards algorithm also looks at trends over time as they relate to both quantitative and qualitative insights shared by employees (Glassdoor, 2022). In some cases, if an employer lacks quality and/or consistency of reviews, it can impact results and/or eligibility. Inclusion of this variable forms the foundation of our investigation as we see how the BPTW companies perform against the market control group.

² Factors include career opportunities, compensation and benefits, culture and values, diversity and inclusion, senior management, work-life balance

4.3.3 Control Variables

A control variable is a variable that is held constant or controlled in an experiment. Control variables are included to minimise potential influence on the relationship between the independent variable, daily returns, and the dependent variable, BPTW. The following information was collected for the treatment group as well as for the control group and decided to test for each of them, Table 1 summarizes our variables.

Variable	Description
<i>BPTW</i>	The BPTW variable represents whether the stock is ranked on Glassdoor's Best Places to Work List.
<i>Size</i>	Size of company based on number of employees. It is categorized as either Small, Medium, or Large.
<i>Revenue</i>	Size of company based on their revenue (USD) categorized as either Small, Medium, or Large.
<i>Age</i>	The company's age is categorized as either Early stage, Mid-stage or Mature stage.
<i>Sector</i>	Sectors in our data set; Technology, Consumer, Finance & Consulting, Industrials, Healthcare, Utilities and Materials

Table 1 - Summary of Variables

Sector

By including the companies Sector as a control variable, it can be assessed whether companies in specific sectors demonstrate various levels of financial performance. This implies that we are controlling for sector fixed effects. Sector fixed effects in a regression refer to the inclusion of, in this case, dummy variables to capture the unique characteristics associated with different sectors within the data. These fixed effects allow for controlling and accounting for sector-specific factors that may influence the relationship between the independent and dependent variables³. When sector fixed effects are included in a regression model, separate dummy variables are created for each sector. Each dummy variable takes a value of 1 if the observation belongs to that specific sector and 0 otherwise. To categorise the companies into their relevant sectors, classification by the following categories was chosen; Healthcare, Materials,

³ See Figure 2 for more details on each sectors average annual return in Appendix

Consumer, Technology, Industrials, Financial & Consulting, Communication, Utilities, and Transportation⁴. By including these dummy variables in the regression model, the analysis accounts for any systematic differences or variations across sectors that may affect the dependent variable.

Revenue

Additionally, dummy variable for Revenue is incorporated to reflect the revenue generated by each company. Company revenue is defined through Glassdoor's definition. Glassdoor categorises company revenue into seven categories which have here been further summarised into three broader groups: Small, Medium and Large⁵. Including company revenue as a variable allows investigation into whether certain revenue levels are associated with better financial performance.

Size

A dummy variable for Size, defined by the number of employees in the company is also included. We follow Glassdoor's categorization here too, again re-categorizing into three broader groups: Small, Medium and Large⁴. Inclusion of this term allows investigation into whether certain company sizes are associated with better financial performance.

Age

Finally, an Age dummy variable is included, defining the age of the company since inception. This is calculated as the year 2022 less the year of inception. After this the companies are categorised by age into three groupings: Early-stage, Mid-Stage and Mature⁴.

⁴ See Figure 3 for Sector distribution across BPTW group in Appendix

⁵ See Table 5 for details on Revenue, Size and Age classification in Appendix

Covid-19

In addition to these company characteristics, the Covid-19 pandemic is incorporated as an interaction dummy variable in the model. When creating the dummy variable to split the sample into pre and post covid, the dummy variable, called Covid, will categorise all returns and relevant information as 0 before January 1st, 2020, and 1 for those after. By adding Covid as an interaction variable, it is possible to measure the specific effect of Covid on the stock returns of companies ranked on the BPTW list. By including this dummy variable in the regression model, it can be assessed whether or not the post-Covid time-period has a statistically significant impact on the dependent variable, daily returns, especially when a company is considered a BPTW.

The coefficient estimate associated with the interaction term represents the average difference in stock returns between the post-Covid period and the reference period, all else being equal. If the coefficient estimate for the post-Covid dummy variable is statistically significant, it indicates that there is a significant difference in stock returns between the post-Covid period and the reference period. This helps us understand the specific impact of the post-Covid period on the dependent variable, while controlling for other variables in the model. This variable allows us to test the hypothesis and examine the specific impact of the pandemic on the financial performance of BPTW companies.

By analysing these variables collectively, including sector, revenue, age and the impact of Covid-19, we aim to gain insights into the relationships between these factors and the financial performance of BPTW companies. Through this analysis, the thesis aims to explore the multifaceted dynamics that influence the success of these companies in a changing environment, particularly in light of the Covid-19 pandemic.

4.5. Hypothesis

To answer our research question; *Do stocks from the BPTW portfolio perform better than a market benchmark post-Covid?*

We create two hypotheses. The first, H01, to check if Companies ranked BPTW outperform the market. The second hypothesis, H02, then allows us to build on the first to include any effect of Covid-19. These are summarised below where the results will be discussed respectively in sections 6.1 and 6.2.

H01: Companies ranked BPTW outperform the market

HA1: Companies ranked BPTW does not outperform the market

H02: Companies ranked BPTW outperform the market more Post Covid

HA2: Companies ranked BPTW do not outperform the market more Post Covid

5. DATA AND VARIABLES

The following section describes all the data used in our study and where it is collected from (5.1). We continue to explain how we have constructed our sample for both the BPTW portfolio and the control group (5.2). Finally, we report descriptive statistics and summary statistics (5.3).

5.1 Data Collection

To maintain consistency and comparability in the analysis, the models are constructed from raw data and based on the same set of assumptions. All data analysis is conducted in R. For the stock data, all stock returns and qualitative data is webscraped from Yahoo Finance and Glassdoor. The companies subject to analysis are those on the UK Glassdoor Best Places to Work list which are publicly listed. Since the model will measure daily returns on a time-series, delisted companies are also included in the dataset for the period they exist. Similarly, companies which for example are listed mid-way through a year are included from the time of listing. Adjusted close prices were retrieved for all stocks to account for splits and dividend and/or capital gain distributions.

5.2 Sample Construction

The aim of this thesis is to study share performance of the publicly traded companies which are listed on Glassdoor's U.K. Best Places to Work list since ranked on the list. To do so, we created a list of all publicly traded companies to win this award from 2017 until 2022. This time frame was specifically chosen to see if a "pre" and "post" covid difference could alter the results. Of the 300 ranked companies from 2017 through 2022, 169 unique companies were represented. Among them, 89 were traded publicly during their time of ranking⁶, approximately 62% of the companies. Therefore, this study focuses solely on the performance of those 89 companies⁷.

In this study, the sample size is determined based on the availability of stock price data for companies listed on the Glassdoor Best Places to Work list since 2017. Our full sample consists of 89 unique companies, representing a diverse range of industries and organisational sizes. The selection of the Glassdoor Best Places to Work list ensures that the sample comprises companies recognized for their positive work environments and employee satisfaction. This choice allows us to examine the impact of workplace factors on stock prices and investor perceptions in organisations that have demonstrated a commitment to employee well-being. The selected sample size of 89 companies offers a robust dataset for analysis, providing sufficient statistical power to detect meaningful relationships and draw reliable conclusions. This sample size allows for a comprehensive examination of the research objectives and facilitates a thorough exploration of the hypothesised relationships between workplace factors and stock prices.

Every year Glassdoor releases their Best Places to Work ranking sometime between late December and early January. To simulate how an investor might use that information, we have followed the same method as used by Glassdoor for their own research whereby we track daily stock returns from the last trading day of the award announcement year through the final trading day of the award year. They provide the example from the 2019 Best Places to Work list which was announced in December 2018; stock returns for publicly traded companies among that year's winners are calculated based on stock price changes between December 31, 2018, and December 31, 2019 (Chamberlain & Munyikwa, 2020, p7). We have followed an identical data

⁶ See Figure 4 in the Appendix for a visual representation.

⁷ See Table 6a and 6b in the Appendix for the BPTW and Control Group Portfolio constructions

collection procedure for our S&P 500 control group⁷. The inclusion of the S&P 500 in our sample provides a broader market perspective and allows us to evaluate the relative performance of the companies on the Best Places to Work list against the overall market trends.

5.3 Descriptive Statistics

Table 2 presents a summary of the key traits and weightings of our treatment and control group and summary statistics of all variables. Additionally, Table 7 in the appendix presents descriptive statistics of the full sample.

	S&P Control Group	BPTW Group
Nr. Stocks	89	89
Revenue _{Large}	96%	76%
Revenue _{Medium}	0%	20%
Revenue _{Small}	4%	2%
Size _{Large}	89%	64%
Size _{Medium}	7%	9%
Size _{Small}	4%	26%
Age _{Mature}	42%	33%
Age _{Mid-Stage}	4%	2%
Age _{EarlyStage}	54%	64%
Communication	4%	4%
Consumer	18%	24%
Finance & Consulting	9%	22%
Healthcare	16%	4%
Industrials	15%	9%
Materials	13%	2%
Technology	9%	24%
Utilities	16%	7%
Transportation	0%	2%

Table 2 – Comparison of BPTW and Control Group Portfolios Variable Distribution

6. RESULTS

6.1. Hypothesis 1 - BPTW Against a Market Benchmark

We begin by testing the hypothesis: *Do companies ranked BPTW outperform the market?*

	(1)	(2)	(3)	(4)	(5)
$BPTW_i$	0.253*** (0.003)	0.160*** (0.003)	0.162*** (0.003)	0.231*** (0.003)	0.252*** (0.003)
Intercept	0.001 (0.001)	0.352*** (0.004)	0.339*** (0.005)	0.069*** (0.069)	-0.073*** (0.008)
$Age_{early-stage}$			0.012*** (0.018)	0.035*** (0.003)	0.063*** (0.003)
$Age_{mid-stage}$			0.072*** (0.008)	0.034*** (0.008)	0.062*** (0.008)
$Size_{medium}$				0.096*** (0.007)	0.046*** (0.007)
$Size_{large}$				0.247*** (0.004)	0.159*** (0.005)
$Revenue_{small}$					0.216*** (0.011)
$Revenue_{large}$					0.195*** (0.006)
Sector Fixed Effects	No	Yes	Yes	Yes	Yes
Observations	100,546	100,546	100,546	100,546	100,546
Adjusted R^2	0.064	0.155	0.156	0.181	0.189

$$(1) : \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \epsilon_i$$

$$(2) : \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 \text{Sector}_i + \epsilon_i$$

$$(3) : \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 \text{Sector}_i + \beta_3 \text{Age}_i + \epsilon_i$$

$$(4) : \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 \text{Sector}_i + \beta_3 \text{Age}_i + \beta_4 \text{Size}_i + \epsilon_i$$

$$(5) : \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 \text{Sector}_i + \beta_3 \text{Age}_i + \beta_4 \text{Size}_i + \beta_5 \text{Revenue}_i + \epsilon_i$$

Note: Standard errors are reported in parentheses. *p<0.1; **p<0.05; ***p<0.01

Table 3 - Impact of various variables on the daily returns of BPTW companies

We chose to run the regression first only including the independent variable, BPTW. The results are presented in Table 3, column 1. We then proceed to control for additional company characteristics one by one until the full regression is presented in Table 3, column 5. We note each coefficient represents the percentage change in daily returns. In the first regression, the BPTW variable coefficient, 0.253, is statistically significant at the $p < 0.01$ level, indicating that being listed on the Best Places to Work list is associated with a significant, positive change in the daily return, holding other variables constant. Moving forward we focus solely on changes to the BPTW coefficient when controlling for additional company characteristics.

Controlling for Company Characteristics

Company characteristics are controlled for by adding one new variable at a time to the regression. By proceeding in this way, we are able to capture the impact adding each new term has on the model and see whether the BPTW variable continues to have a significant effect on the returns. We will start by including the Sectors variable, Table 3, column 2, from there we proceed to include Age in column 3, Size in column 4 and Revenue in column 5.

We first control for Sector Fixed Effects to capture the effects associated with different sectors in the regression analysis, helping to isolate the relationship of interest and minimise potential confounding factors specific to certain sectors. To interpret the coefficients associated with sector fixed effects, we compare the coefficients of the other independent variables in the model. Through this we find that there is evidence of sector fixed effects. After controlling for Sector Fixed Effects to capture the effects associated with different sectors in the regression analysis, we observe that the coefficient of the BPTW variable remains statistically significant at the $p < 0.01$ level. In this case, a one-unit increase in the BPTW score is associated with an estimated increase of 0.160% in the daily returns. This indicates that being included on the Best Places to Work list is associated with a significant, positive change in daily returns, holding other variables constant.

Additionally, with the inclusion of the Age variable in the model, column 3, the coefficient of BPTW remains statistically significant at the $p < 0.01$ level. The estimated change in daily returns for a one-unit increase in the BPTW score is now 0.162, indicating a very slight increase compared to the previous model.

Moving forward, we introduce the Size variable to the model. We observe that the BPTW variable continues to be statistically significant at the $p < 0.01$ level. With the inclusion of the Size variable, a one-unit increase in the BPTW score is now associated with an estimated increase of 0.231% in daily returns.

Finally, we incorporate the Revenue variable into the model, and we find that the BPTW variable remains significant at $p < 0.01$ with a positive effect on daily returns with a coefficient of 0.252. These findings suggest that companies that prioritize employee welfare, as represented by their inclusion in the BPTW group, tend to achieve better financial performance even after controlling for sector fixed effects, company age, size, and revenue.

6.2. Hypothesis 2 - The Effect of Covid-19

We now test the main hypothesis; *Do stocks from the BPTW portfolio perform better than a market benchmark post-Covid?*

	(1)	(2)	(3)	(4)	(5)
$BPTW_i$	0.159*** (0.004)	0.079*** (0.004)	0.080*** (0.004)	0.148*** (0.004)	0.171*** (0.005)
$BPTW_i * Covid_t$	0.191*** (0.006)	0.163*** (0.006)	0.162*** (0.006)	0.172*** (0.006)	0.160*** (0.006)
Intercept	0.001 (0.003)	0.343*** (0.005)	0.326*** (0.006)	0.037 *** (0.007)	-0.080*** (0.009)
$Age_{early-stage}$			0.017 *** (0.003)	0.041*** (0.003)	0.064*** (0.003)
$Age_{mid-stage}$			0.064*** (0.008)	0.023*** (0.008)	0.048*** (0.008)
$Size_{medium}$				0.115*** (0.007)	0.072*** (0.007)
$Size_{large}$				0.261*** (0.004)	0.188*** (0.005)
$Revenue_{small}$					0.189*** (0.011)
$Revenue_{large}$					0.162*** (0.006)
Sector fixed effects	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Observations	100,546	100,546	100,546	100,546	100,546
Adjusted R^2	0.082	0.168	0.169	0.197	0.203

$$(1) : \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \epsilon_i$$

$$(2): \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 \text{Sector}_i + \epsilon_i$$

$$(3): \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 \text{Sector}_i + \beta_4 \text{Age}_i + \epsilon_i$$

$$(4): \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 \text{Sector}_i + \beta_4 \text{Age}_i + \beta_5 \text{Size}_i + \epsilon_i$$

$$(5): \text{Return}_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 \text{Sector}_i + \beta_4 \text{Age}_i + \beta_5 \text{Size}_i + \beta_6 \text{Revenue}_i + \epsilon_i$$

Note: Standard errors are reported in parentheses. *p<0.1; **p<0.05; ***p<0.01

Table 4 - Impact of various variables on the daily returns of BPTW companies during Covid

We now choose to run the regression now including an interaction term between BPTW and Covid for several reasons. First, it allows us to conduct a specific analysis of the relationship between variables in each period, specifically capturing the effects of Covid-19. This approach provides us with a more detailed understanding of how the relationship between BPTW and daily returns might have changed due to the impact of Covid-19. Additionally, by running this regression, we can identify any differential effects or changes in the coefficients and statistical significance of variables between the pre-Covid and post-Covid periods. This enhances our interpretation of the results and provides insights into the unique effects during the Covid-19 period. Overall, running the regression with an interaction term for Covid allows us to conduct a more nuanced analysis of the relationship between variables during each period. Note again that each coefficient represents the percentage change in daily returns. We proceed by first only including an interaction for Covid and then proceeding to add additional company control variables one by one until the full regression is shown in Table 4, column 5.

We first run the regression by including only the variables BPTW and the Covid interaction term, BPTW*Covid, as shown in Table 4, column 1. The results reveal that companies listed on the Best Places to Work ranking exhibit a significantly higher average daily return, with an estimate of 0.159 at $p < 0.01$. This suggests that being listed on the BPTW ranking is associated with a positive impact on daily returns, even when considering the Covid interaction effect.

Furthermore, the interaction term between BPTW and Covid shows a positive and statistically significant relationship with daily returns, with a coefficient of 0.191 where $p < 0.01$. This implies that the effect of being listed on the BPTW ranking is further enhanced during the Covid-19 period. Companies ranked BPTW may demonstrate even stronger outperformance in the market, particularly in the post-Covid period. These findings emphasize the importance of the BPTW ranking on daily returns, indicating that companies prioritizing employee welfare and being recognized for it have a positive impact on their financial performance.

Moreover, the interaction between BPTW and Covid highlights the unique effects of the Covid-19 period, suggesting that the relationship between BPTW and returns may be amplified during times of significant disruption, such as the pandemic. Overall, these results indicate that companies listed on the BPTW ranking have higher returns, and the Covid-19 period further

strengthens this relationship. This underscores the relevance of employee welfare and suggests that companies emphasizing workplace excellence may enjoy a competitive advantage in the market, particularly in the post-Covid era.

Controlling for Company Characteristics

We proceed to control for company characteristics in the same method as in section 6.1, adding one new variable at a time to the regression. By proceeding in this way, we are able to capture the impact adding each new term has on the model and see whether the BPTW companies outperform the market more post-Covid. We will start by including the Sectors variable, Table 4, column 2, from there we proceed to include Age column 3, Size in column 4 and then company Revenue in column 5.

After controlling for sectors, we find that the sector fixed effects do exist in the model, suggesting that different sectors have varying impacts on daily returns. Additionally, both the BPTW variable and the BPTW*Covid interaction term remain statistically significant at the $p < 0.01$ level, with a coefficient of 0.163, indicating their importance in explaining daily returns. However, the coefficient of the BPTW variable is largely reduced compared to the initial model in column 1. Proceeding to include the Age variable in the model, column 3, we find that the interaction term between BPTW and Covid remains positive and significant at $p < 0.01$. This indicates that the impact of being listed on the Best Places to Work is enhanced during the Covid-19 period, as represented by the significant interaction term coefficient of 0.162.

Next, we introduce the Size variable to the model, column 4. The interaction term between BPTW and Covid continues to significantly impact daily returns, with a coefficient of 0.172, $p < 0.01$. This suggests that companies ranked BPTW may have higher returns, particularly in the post-Covid period, further supporting our hypothesis.

Finally, when incorporating the Revenue variable into the fifth model, column 5, we observe that the interaction term remains statistically significant. This finding indicates that the positive relationship between BPTW and daily returns, along with the enhanced effect during the Covid-19 period, persists even after controlling for company revenue. In this case, we find that BPTW firms, in general, tend to have higher returns, particularly during the post-Covid period.

Overall, these results demonstrate that being listed on the Best Places to Work has a significant positive impact on daily returns. Furthermore, the interaction term with Covid highlights the specific influence of the Covid-19 period, wherein BPTW companies may have even stronger performance. Controlling for sector fixed effects, age, size, and revenue further supports the robustness of these findings and suggests that employee welfare, as represented by the BPTW ranking, is associated with better financial performance. Thus confirming our second hypothesis; companies ranked BPTW outperform the market more post-Covid.

7. CONCLUSION

7.1 Main Findings and Implications

In summary, we conducted a series of regression analyses to examine the relationship between the BPTW group and the Return variable while considering various control factors. Our hypothesis was that companies in the BPTW group would have higher returns than those which are not, indicating the benefits of investing in employee welfare for financial performance. Our findings consistently supported our hypothesis across all regression models. The coefficient for the BPTW group was consistently positive and statistically significant ($p < 0.01$) in all models. This indicates that being in the BPTW group is associated with higher daily returns compared to other groups. Even after including additional control variables related to financial and sector-specific factors, the positive association between the BPTW variable and daily returns remained significant, in fact at its highest. These findings suggest that companies who prioritise employee welfare, as represented by the BPTW group, tend to achieve better financial performance. In conclusion, our results provide support for the idea that investing in employee welfare, as exemplified by the BPTW variable, can yield higher returns. These findings suggest that considering employee well-being as a strategic priority can have positive financial implications for companies. After these findings, we proceeded to test our main research question; *Do companies ranked BPTW outperform the market more Post Covid?*

After expanding our regression to include an interaction term between BPTW and Covid we conducted an analysis to examine the relationship between the variables in our model. The results, based on the interpretation of the coefficients, reveal important insights. When considering the first model, where only BPTW and BPTW * Covid are included, we observe

that BPTW has a significantly positive effect on Return. However, the interaction term BPTW * Covid is statistically significant, indicating that the impact of BPTW on Return does vary with the presence of Covid. Moving to the second model, we introduce Sector as a fixed effect, which demonstrates a significant association with daily returns. In the subsequent models, Age and Size are added, and we find that both variables have significant effects on Return. Finally, when incorporating Revenue in the fifth model, we find that BPTW firms, in general, tend to have higher returns, particularly during the post-Covid period. These results demonstrate that being listed on the Best Places to Work list has a significant positive impact on daily returns. Furthermore, the interaction term with Covid highlights the specific influence of the Covid period.

Overall, these findings highlight the importance of BPTW in influencing returns, while considering other factors such as Sector, Age, Size, and Revenue. These results are in line with recent literature such as the study by Shan et al., (2022) which showed that the high employee satisfaction could be materialised during negative shocks. Moreover, these findings also concur with Symitisi et al.,(2018) where authors found a statistically significant positive association between average employee satisfaction rating and corporate performance.

In conclusion, our results provide support for the idea that investing in employee welfare, as exemplified by the BPTW variable, can yield higher returns. These findings suggest that considering employee well-being as a strategic priority can have positive financial implications for companies. A plausible explanation for these results could be a shift in mentality caused by COVID-19 regarding championing employee welfare as a part of company success. This shift in mentality could explain the consistent positive association between the BPTW group and greater returns, as companies prioritize the well-being of their employees in response to the challenges posed by the pandemic.

7.2 Limitations and Further Research

By definition, a risk-averse investor will consider a more risky portfolio if they are provided compensation for risk via a risk premium (Bodie, Kane, & Marcus, 2014). As the risk-averse investor bases their choice on the CAPM holding true, the investor would choose the market

portfolio (S&P 500) unless there is fair compensation for any risk the BPTW may hold. However, it may be that the investor believes that in the long run, an investment in sustainable assets, such as BPTW, will yield a higher return than the current market portfolio. The investor may believe that these assets are currently undervalued by the market and, therefore, expect higher expected future returns in the future.

Despite the fact that we have included control variables, we acknowledge that there may be elements that we have overlooked, which could affect both the Best Places to Work (BPTW) group and the overall daily returns. This raises concerns about the presence of omitted variable bias, as unaccounted factors could potentially influence the observed association between BPTW membership and higher returns. For instance, if the S&P 500 index were replaced by the exact companies that consistently made the BPTW cut every year, the results might differ due to the influence of particular company features.

Furthermore, we acknowledge that although chosen at random, our control group selection process may have been biased, which may affect the broad applicability of our results. Future research should work to overcome these flaws and employ more rigorous techniques to ensure a more thorough study that addresses these limitations.

Additionally, our study relied on an equally weighted portfolio, treating all companies in the BPTW group equally, regardless of their market capitalization or relative importance. However, this approach may not accurately reflect the market dynamics and the potential influence of larger companies within the BPTW group. To enhance the robustness of our findings, it would be interesting to consider employing a value-weighted portfolio methodology in future research, which would account for the varying sizes and market impact of the BPTW companies. Additionally, to extend our research we also suggest performing further tests for heteroscedasticity and autocorrelation to ensure OLS assumptions are not violated, which then may be controlled for using Newey West methods. Our initial findings exploring this avenue are included in the appendix, table 8a and 8b. These suggest the adjustment may have an impact on the overall significance of our results. We still found that being ranked BPTW still held a positive statistically significant impact on daily returns.

Moreover, in-depth research could explore the persistence of the excess returns associated with the BPTW group. By examining the long-term effects of investing in employee welfare, we would gain insights into the sustainability of improved profits over time. Such analysis would provide a more comprehensive understanding of the financial implications of prioritizing employee well-being.

In summary, while our study contributes to the understanding of the relationship between the BPTW group and returns, we acknowledge the potential presence of omitted variable bias, sample selection bias, and the need for more nuanced methodologies. Addressing these concerns and conducting further research would strengthen the validity and reliability of our findings.

APPENDIX

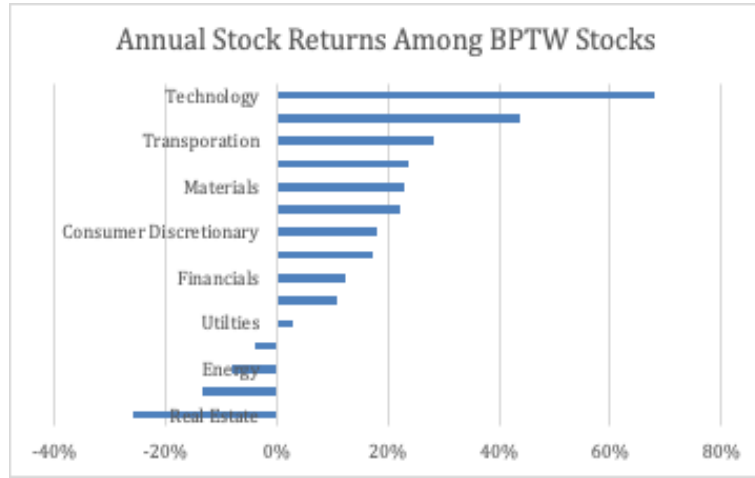


Figure 2 - Distribution of BPTW Annual Stock Returns by Sector

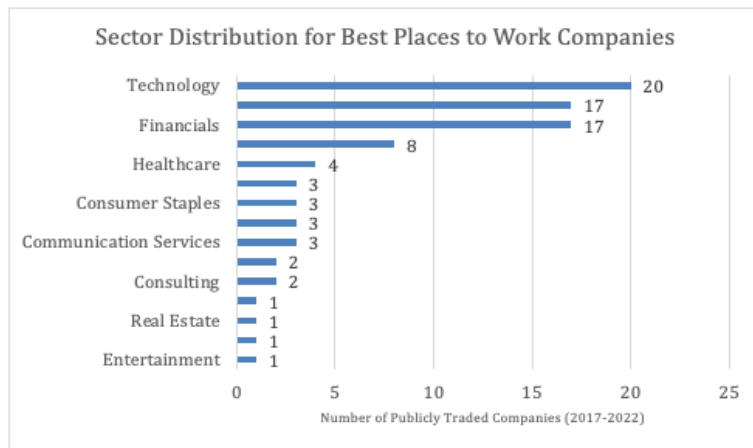


Figure 3 - Sector Distribution of BPTW Stocks

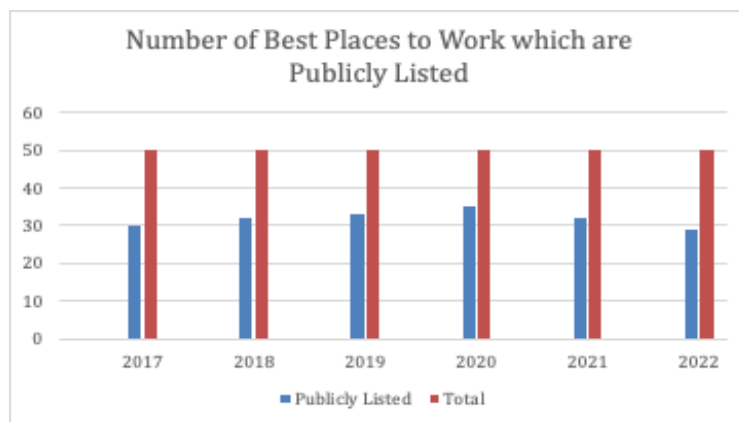


Figure 4 – Distribution of publicly listed companies on the BPTW ranking

Variable Name	Variable Composition
Revenue <i>Small</i>	Companies with a revenue between \$0.5 million and \$15 million
Revenue <i>Medium</i>	Companies with a revenue between \$300 million and \$750 million
Revenue <i>Large</i>	Companies with a revenue between \$3 billion and \$10 billion
Size <i>Small</i>	Companies with 201 to 5000 employees
Size <i>Medium</i>	Companies with 5,001 to 10,000 employees
Size <i>Large</i>	Companies with more than 10,000 employees
Age <i>Early-stage</i>	Companies less than 75 years old
Age <i>Mid-stage</i>	Companies between 75 to 85 years old
Age <i>Mature stage</i>	Companies more than 85 years old

Table 5 - Company Characteristics and Categorized Variables for Revenue, Size, and Age

Year	Portfolio Composition
2017	Expedia Group, HomeServe, Unilever, Salesforce.com, Fresh Del Monte Produce, American Express Company, Alphabet , Accenture, Pages Group Limited, GlaxoSmithKline, Centrica, Rackspace Technology,, Diageo, General Electric Company, Cisco Systems,, Microsoft Corporation, BP, SAP SE, Royal Dutch Shell, Credit Suisse Group AG, JPMorgan Chase & Co., easyJet, Apple, Rolls-Royce Holdings, Capgemini SE, UBS Group AG, Sainsbury, Schlumberger Limited, Thomson Reuters Corporation, Starbucks Corporation.
2018	Alphabet Inc, Meta Platforms, Salesforce.com, Lookers, Rentokil Initial, Hiscox, Apple, HomeServe, Capital One Financial Corporation, Expedia Group, Taylor Wimpey, Booking Holdings, Flutter Entertainment, Procter & Gamble Company, Pages Group Limited, Microsoft Corporation, American Express Company, Rolls-Royce Holdings, XPO Logistics, Capgemini SE, JPMorgan Chase & Co., GlaxoSmithKline, Telefonica SA, The Goldman Sachs Group,, Gartner,, UBS Group AG, easyJet, Unilever, Wipro Limited, Metro Bank, WeightWatchers International,, SAP SE, General Electric Company.
2019	XPO Logistics,, Salesforce.com, Flutter Entertainment, Hiscox, SAP SE, Taylor Wimpey, Microsoft Corporation, Gartner,, Alphabet, Capital One Financial Corporation, HomeServe, Cisco Systems,, Metro Bank, Arcadis NV, InterContinental Hotels Group, Royal Dutch Shell, GlaxoSmithKline, Telefonica SA, JPMorgan Chase & Co., Diageo, Dunelm Group, Direct Line Insurance Group, The Goldman Sachs Group,, Cisco Systems,, Rolls-Royce Holdings, Royal Dutch Shell, easyJet, Apple, Severn Trent, Siemens AG, Accenture, Hilton Worldwide Holdings, Amsterdam Commodities N.V.
2020	Alphabet, Salesforce.com, HealthStream,, SoftCat, Microsoft Corporation, SAP SE, Topps Tiles, Cisco Systems,, Arcadis NV, easyJet, Johnson & Johnson, Rentokil Initial, United Utilities Group, Royal Dutch Shell, JPMorgan Chase & Co., American Express Company, Nike,, Telefonica SA, Siemens AG, GlaxoSmithKline, Rolls-Royce Holdings, Apple, Capgemini SE, Unilever, Accenture, Meta Platforms, The Goldman Sachs Group,, Taylor Wimpey, Ford Motor Company, AstraZeneca, Barratt Developments, IRE Investa Office Fund.
2021	Salesforce.com, Microsoft Corporation, Alphabet, SoftCat, Apple, SAP SE, Meta Platforms Flutter Entertainment, AstraZeneca, JPMorgan Chase & Co., American Express Company, Sage Group, Johnson & Johnson, Majestic Wine, JetBlue Airways Corporation, Royal Dutch Shell, Siemens AG, The Goldman Sachs Group,, Dell Technologies, Mondelez International,, Capgemini SE, Taylor Wimpey, Penske Automotive Group,, British American Tobacco, Morgan Stanley, Bank of America Corporation, BlackRock,, Cisco Systems,, Jacobs Engineering Group, GlaxoSmithKline, The Walt Disney Company, Greggs, Royal Dutch Shell.
2022	ServiceNow,, Salesforce.com, Abcam, Adobe, VMware,, Meta Platforms Microsoft Corporation, Mastercard Incorporated, Dell Technologies, Zurich Insurance Group AG, Alphabet SAP SE, Wise Group Limited, Ocado Group, Apple, Diageo, The Gym Group, Arcadis NV, Flutter Entertainment, Barratt Developments, Socotra Capital, Cisco Systems,, Sage Group, Kainos, Johnson & Johnson, S&P Global, Ford Motor Company, JetBlue Airways Corporation, Procter & Gamble Company, Marriott International,, Capgemini SE, Telefonica SA.

Table 6a - BPTW Yearly Portfolio Composition

Year	Portfolio Composition
2017	Welltower, General Dynamics, AT&T, Exelon, Texas Instruments, Cognizant Technology Solutions, Colgate-Palmolive, Costco Wholesale, NVIDIA, The Coca-Cola Company, The Charles Schwab, Freeport-McMoRan, Kimberly-Clark, Altria Group, Verizon Communications, The TJX Companies, Thermo Fisher Scientific, Merck & Co., McDonald's, Honeywell International, Phillips 66, Equinix, Amgen, Comcast, The Home Depot, Dominion Energy, Danaher, Philip Morris, Berkshire Hathaway, Raytheon Technologies
2018	Amgen, MetLife, The Boeing Company, Equinix, Chevron, The TJX Companies, Lowe's Companies, Welltower, Air Products and Chemicals, AT&T, Caterpillar, Phillips 66, Citigroup, Freeport-McMoRan, NextEra Energy, General Dynamics, Amazon.com, Abbott Laboratories, McDonald's, Exxon Mobil, Oracle, Visa, Pioneer Natural Resources, PACCAR, Becton, Dickinson and Company, Chubb, Lockheed Martin, Intel, Simon Property Group, The Sherwin-Williams Company, Gilead Sciences, Boston Scientific
2019	General Motors, Bristol Myers Squibb, Duke Energy, Pfizer, Prologis, The TJX Companies, Chipotle Mexican Grill, Southern, Linde, Amgen, Kimberly-Clark, Nucor, Amazon.com, U.S. Bancorp, The Coca-Cola Company, The Boeing Company, Equinix, Deere, Exelon, The Charles Schwab, Intel, Broadcom, Altria Group, NVIDIA, UnitedHealth Group, McDonald's, FedEx, Valero Energy, Wells Fargo, Phillips 66, Oracle, Caterpillar, Northrop Grumman
2020	NVIDIA, AbbVie, Marathon Petroleum, Welltower, Southern, Texas Instruments, United Parcel Service, Danaher, General Dynamics, Valero Energy, McDonald's, Dominion Energy, Gilead Sciences, Linde, Eli Lilly, Verizon Communications, American Tower, Raytheon Technologies, 3M, Target, U.S. Bancorp, PPG Industries, Fidelity National Information Services, Exelon, Pinnacle West Capital, Chipotle Mexican Grill, NextEra Energy, Exxon Mobil, Broadcom, Bristol Myers Squibb, Simon Property Group, Chubb
2021	Equinix, FedEx, PPG Industries, UnitedHealth Group, Intel, Prologis, PepsiCo, McDonald's, Simon Property Group, NextEra Energy, Ecolab, Target, Walmart, Colgate-Palmolive, Lowe's Companies, Air Products and Chemicals, The Home Depot, Chevron, Philip Morris International, Berkshire Hathaway, Visa, Bristol Myers Squibb, The Coca-Cola, Wells Fargo, International Business Machines, General Motors, 3M, The Charles Schwab, Deere, Netflix, PACCAR, AbbVie, Eli Lilly
2022	Netflix, Air Products and Chemicals, Walmart, Kinder Morgan, General Motors, PepsiCo, Kimberly-Clark, Altria Group, 3M, The Home Depot, Cognizant Technology Solutions, McDonald's, Chevron, ConocoPhillips, Dominion Energy, Chubb, Southern, Deere, Medtronic, The Boeing Company, Amgen, Marathon Petroleum, Northrop Grumman, Broadcom, Berkshire Hathaway, Visa, Citigroup, 3M, Fidelity National Information Services, Nucor, AT&T, Union Pacific.

Table 6b - S&P 500 Control Group Yearly Portfolio Composition

Variable	n	mean	sd	median	min	max	range	skew	kurtosis
Daily Returns	100546	0,13	0,50	0,01	-0,95	4,80	5,75	4,94	30,63
BPTW	100546	0,50	0,50	0,00	0,00	1,00	1,00	0,01	-2,00
Finance & Consulting	100546	0,16	0,36	0,00	0,00	1,00	1,00	1,89	1,55
Communication	100546	0,05	0,22	0,00	0,00	1,00	1,00	4,15	15,23
Consumer	100546	0,18	0,39	0,00	0,00	1,00	1,00	1,65	0,71
Utilities	100546	0,10	0,31	0,00	0,00	1,00	1,00	2,59	4,68
Healthcare	100546	0,09	0,29	0,00	0,00	1,00	1,00	2,87	6,24
Industrials	100546	0,12	0,32	0,00	0,00	1,00	1,00	2,38	3,66
Materials	100546	0,08	0,26	0,00	0,00	1,00	1,00	3,21	8,28
Technology	100546	0,20	0,40	0,00	0,00	1,00	1,00	1,47	0,17
Transportation	100546	0,02	0,14	0,00	0,00	1,00	1,00	6,78	43,97
Age_{Early}	100546	0,60	0,49	1,00	0,00	1,00	1,00	-0,41	-1,83
Age_{Mid}	100546	0,04	0,20	0,00	0,00	1,00	1,00	4,58	18,95
Age_{Mature}	100546	0,36	0,48	0,00	0,00	1,00	1,00	0,59	-1,65
Size_{Large}	100546	0,79	0,41	1,00	0,00	1,00	1,00	-1,40	-0,04
Size_{Medium}	100546	0,07	0,26	0,00	0,00	1,00	1,00	3,30	8,88
Size_{Small}	100546	0,14	0,35	0,00	0,00	1,00	1,00	2,07	2,27
Revenue_{Small}	100546	0,02	0,15	0,00	0,00	1,00	1,00	6,50	40,23
Revenue_{Medium}	100546	0,10	0,30	0,00	0,00	1,00	1,00	2,65	5,03
Revenue_{Large}	100546	0,88	0,33	1,00	0,00	1,00	1,00	-2,30	3,27

Table 7 – Descriptive Statistics of the Variables

	(1)	(2)	(3)	(4)	(5)
$BPTW_i$	0.253*** (0.056)	0.160*** (0.035)	0.162*** (0.035)	0.231*** (0.050)	0.252*** (0.055)
Intercept	0.001*** (0.0001)	0.352*** (0.110)	0.339*** (0.103)	0.069 (0.063)	-0.073 (0.077)
$Age_{early-stage}$			0.012 (0.018)	0.035 (0.022)	0.063** (0.025)
$Age_{mid-stage}$			0.072*** (0.020)	0.034** (0.017)	0.062*** (0.018)
$Size_{medium}$				0.096 (0.062)	0.046 (0.055)
$Size_{large}$				0.247*** (0.084)	0.159** (0.070)
$Revenue_{small}$					0.216*** (0.079)
$Revenue_{large}$					0.195*** (0.068)
Sector fixed effects	No	Yes	Yes	Yes	Yes
Observations	100,546	100,546	100,546	100,546	100,546
Adjusted R^2	0.064	0.155	0.156	0.181	0.189

(1) : $Return_i = \beta_0 + \beta_1 BPTW_i + \epsilon_i$

(2): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 Sector_i + \epsilon_i$

(3): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 Sector_i + \beta_3 Age_i + \epsilon_i$

(4): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 Sector_i + \beta_3 Age_i + \beta_4 Size_i + \epsilon_i$

(5): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 Sector_i + \beta_3 Age_i + \beta_4 Size_i + \beta_5 Revenue_i + \epsilon_i$

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table 8a - Impact of variables on daily returns Adjusted using Newey West

	(1)	(2)	(3)	(4)	(5)
$BPTW_i$	0.159*** (0.018)	0.079*** (0.030)	0.080*** (0.030)	0.148*** (0.026)	0.171*** (0.028)
$BPTW_i * Covid_t$	0.191 (0.124)	0.163 (0.107)	0.162 (0.106)	0.172 (0.108)	0.160 (0.107)
Intercept	0.001*** (0.0001)	0.343*** (0.103)	0.326*** (0.095)	0.037 (0.066)	-0.080 (0.085)
$Age_{early-stage}$			0.017 (0.020)	0.041* (0.024)	0.064** (0.026)
$Age_{mid-stage}$			0.064*** (0.017)	0.023 (0.018)	0.048** (0.019)
$Size_{medium}$				0.115 (0.075)	0.072 (0.070)
$Size_{large}$				0.261*** (0.093)	0.188*** (0.086)
$Revenue_{small}$					0.189*** (0.079)
$Revenue_{large}$					0.162** (0.067)
Sector fixed effects	No	Yes	Yes	Yes	Yes
Observations	100,546	100,546	100,546	100,546	100,546
Adjusted R^2	0.082	0.168	0.169	0.197	0.203

(1) : $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \epsilon_i$

(2): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 Sector_i + \epsilon_i$

(3): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 Sector_i + \beta_4 Age_i + \epsilon_i$

(4): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 Sector_i + \beta_4 Age_i + \beta_5 Size_i + \epsilon_i$

(5): $Return_i = \beta_0 + \beta_1 BPTW_i + \beta_2 BPTW_i * Covid_i + \beta_3 Sector_i + \beta_4 Age_i + \beta_5 Size_i + \beta_6 Revenue_i + \epsilon_i$

Note: *p<0.1; **p<0.05; ***p<0.01

Table 8b - Impact of variables on daily returns when including Covid Adjusted using Newey

West

BIBLIOGRAPHY

Albuquerque, R. A., Koskinen, Y., Yang, S., & Zhang, C. (2020). Resiliency of Environmental and Social Stocks: An Analysis of the Exogenous Covid-19 Market Crash. *European Corporate*. <http://dx.doi.org/10.2139/ssrn.3583611>

Bansal, M., Samad, T. A., & Bashir, H. A. (2021). The sustainability reporting-firm performance nexus: evidence from a threshold model. *Journal of Global Responsibility*. <https://doi.org/10.1108/JGR-05-2021-0049>

Bateman, T. S., & Organ, D. W. (1983). *Job Satisfaction and the Good Soldier: The Relationship between Affect and Employee Citizenship*. *Academic and Management Journal*, 26, 587-595. <http://dx.doi.org/10.2307/255908>

Bodie, Z., Kane, A., & Marcus, A. J. (2014). *Investments*. (12th Ed.). McGrawHill Education.

Chamberlain, A., & Munyikwa, Z. (2020). *What's Culture Worth? Stock Performance of Glassdoor's Best Places to Work 2009 to 2019*. Glassdoor <https://shorturl.at/uvyH3>

Chamberlain, A. (2015). *Does Company Culture Pay Off? Analyzing Stock Performance of "Best Places to Work" Companies*. Glassdoor. <https://shorturl.at/kxBLO>

Diltz, D. J. (1995). Does Social Screening Affect Portfolio Performance? *Journal of Investing*, 4, 64-69. <http://dx.doi.org/10.3905/joi.4.1.64>

Ding, W., Levine, R., Lin, C., & Xie, W. (2021). Corporate immunity to the Covid-19 pandemic. *Journal of Financial Economics*, 141(2), 802-830. <https://doi.org/10.1016/j.jfineco.2021.03.005>

Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3), 621-640. <https://doi.org/10.1016/j.jfineco.2011.03.021>

Symitsi, E., Stamolampros, P., Daskalakis, G. (2018). Employees' online reviews and equity prices. *Economics Letters*, 162, 53-55, <https://doi.org/10.1016/j.econlet.2017.10.027>.

Glassdoor. (2022). *Glassdoor Announces Awards Criteria for the Best Places to Work 2023*. <https://www.glassdoor.co.uk/employers/blog/glassdoor-announces-awards-criteria-for-the-best-places-to-work/>

Glassdoor. (2023,06, 28). *Home*. Retrieved from Glassdoor Web site: <https://www.glassdoor.com/member/home/index.htm>

Green, T. C., Huang, R., Wen, Q., & Zhou, D. (2019). Crowdsourced employer reviews and stock returns. *Journal of Financial Economics*, 134(1), 236-251. <https://doi.org/10.1016/j.jfineco.2019.03.012>

Gorton, G., & Schmid, F. A. (2004). Capital, Labor, and the Firm: A Study of German Codetermination. *Journal of the European Economic Association*, 2(5), 863–905. <http://www.jstor.org/stable/40005074>

Laker, B. (2021). *Culture Is A Company's Single Most Powerful Advantage. Here's Why*. <https://www.forbes.com/sites/benjaminlaker/2021/04/23/culture-is-a-companys-single-most-powerful-advantage-heres-why/>

Shan, C., & Tang, D. Y. (2022). The Value of Employee Satisfaction in Disastrous Times: Evidence from COVID-19. *Review of Finance*, 27(3), 1027-1076. <http://dx.doi.org/10.2139/ssrn.3560919>

Taylor, F. (1911). *The Principles of Scientific Management*. (1st Ed.). Harper Bros.

YahooFinance. (2023, 06 28). *Home*. Retrieved from Yahoo Finance Web site: <https://finance.yahoo.com>