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Treat your employees or the Trick is on you
Performance Evidence from European firms

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Treat your employees or the Trick is on you

Performance Evidence from European firms

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Abstract

The link between employee satisfaction and performance has been predominantly discussed in recent years through the scope of market returns. However, the underlying mechanisms of such link still remain widely indefinite at an operational level. Do Companies with high levels of employee satisfaction develop superior mechanisms of operational value creation? This thesis addresses the operational performance of 125 companies that ranked consistently in the “Best Companies to Work For” list in 15 European Countries from 2003-2011, by benchmarking their performance measures against a geographical- and industry- and size-matched peer group. It unveils the superior operational performance of companies with outstanding employee relations in a cross-country and cross-time analysis. We find that “Best Companies to Work For” enjoy significant abnormal operational performance both in an economic growth period (2003-2007) and during the recession (2008-2011). The study unveils that the superior operational performance is driven by a greater efficiency in cost managing and capital utilization that overcompensates higher costs related with wages. This project management efficiency is obtained regardless of differences in the capital structure such as lower debt levels, introducing job satisfaction as a complimentary mechanism to the disciplinary role of debt.

Keywords: Employee Satisfaction, Operational Performance, European Market, Capital Structure

Résumé

La relation entre la satisfaction des employés et la performance de l'entreprise a été amplement discuté au cours des dernières années, principalement dans une perspective de valeur actionnariale. Cependant, les mécanismes sous-jacents à ce lien restent encore largement indéterminés au niveau opérationnel. Est-ce que les sociétés ayant les niveaux les plus élevés de satisfaction des employés développent des mécanismes supérieurs de création de valeur opérationnelle ? Ce mémoire concerne la performance opérationnelle de 125 entreprises qui se sont classées continuellement dans la liste "Le Palmarès des Entreprises où il fait bon travailler" dans 15 pays européens entre 2003-2011. Il s'agit d'une analyse comparative des mesures de performance, en faisant un benchmark avec un groupe choisi sur un critère géographique, industriel et de taille. Nous constatons que les "Les Entreprises où il fait bon Travailler" ont une surperformance significative tant dans une période de croissance économique (2003-2007) comme pendant la récession (2008-2011). Cette étude révèle que la performance opérationnelle anormale est expliquée par une efficacité supérieure dans la gestion des coûts et dans l'utilisation du capital, qui compense quand même la hausse des coûts liés aux salaires. Cette efficacité est obtenue indépendamment de l'existence de différences dans la structure du capital tel qu'un faible niveau d'endettement. Ces résultats introduisent la satisfaction au travail comme un mécanisme complémentaire au rôle disciplinaire de la dette.

Resumo

A relação entre satisfação dos trabalhadores e a performance da empresa tem sido amplamente discutida nos últimos anos, particularmente sobre a óptica do mercado financeiro. Uma das principais problemáticas em questão prende-se com o reconhecimento dos mecanismos que constituem a citada relação. Será que as empresas com elevados níveis de satisfação dos trabalhadores desenvolvem mecanismos superiores de criação de valor ao nível operacional? O presente estudo foca-se no desempenho operacional de 125 empresas que se classificaram constantemente para a lista de "Melhores Empresas para Trabalhar" em 15 países Europeus entre 2003-2011, através da análise comparativa de medidas de rentabilidade em relação um a *benchmark* de empresas escolhidas através de um critério geográfico, industrial e de dimensão. Prova-se que as "As Melhores Empresas para Trabalhar" demonstram uma performance operacional superior tanto durante períodos de crescimento económico (2003-2007) como durante um período de recessão (2008-2011). O estudo revela que esta superior performance operacional é explicada por uma maior eficiência na gestão de custos e na utilização de capital, que chega mesmo a compensar os maiores custos salariais suportados por estas empresas. Esta eficácia ao nível da gestão é obtida independentemente de uma estrutura de capitais diferente, como rácios de endividamento inferiores. Deste modo, introduz-se o conceito de satisfação dos trabalhadores como mecanismo complementar do papel disciplinador da dívida.

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"If I have seen further, it is by standing on the shoulders of Giants", Isaac Newton

I dedicate this thesis to my family for their unconditional support in my life. To my parents, for teaching me to embrace every opportunity while pursuing my goals and ambitions. I am extremely thankful for inspiring me to welcome a fulfilled life in Oporto, Wrocław, Lisbon and Paris. To my sisters, for coloring my daily-life with joy and reminding me to stay cheerful through bad and good times.

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1. Introduction

The sole purpose of businesses is to create value. It's regularly the initial mot, the main ingredient, behind any managerial and financial research or action. This plea is highly consensual as a starting and a finish line but highly controversial on its definition, mainly on three different areas. First, there is a problematic concerning the existence of a multitude of meanings to what value is. Secondly, the major point of controversy relies on who the right addressee of the created value should be. Here emerges the concept of Corporate Social Responsibility defined by the World Bank Council for Sustainable Development as "the continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large". Thirdly, the final area of discussion regards the debate on what are the underlying mechanisms to value creation, where Landy (1989) referred the link between job satisfaction and job performance as the "Holy Grail" of Organizational Behaviour.

In the last decades, since the emergence of the issue of firm social responsibility (SR), many have been the views of *who* should companies target to reward and *how* would it affect their operational and financial performance, this is, their ability to further create value. This debate gained particular relevance in the most recent years, but was firstly recognized as a controversial worldwide subject after the renowned publication of Milton Friedman's "The Social Responsibility of Business is to Increase its Profits" (Friedman, 1970).

With the crescent globalization and digitalization of the world, companies are challenged on daily basis to answer to new fast-changing challenges and environments over highly public microscopic lenses (the Society of Information). Hence, companies are increasingly required to promote transparency and social relations. In a market characterized by the globalization of financial markets as well as rising social problems (unemployment, purchasing power dilapidation, wealth distribution, among others), corporations find themselves balancing in between economic success and responsibility towards stakeholders - employees, customers, society and more recently, the environment (Zimmerman, 1998).

To deal with the crescent awareness of this topic and its implications on the company's core activities, corporations are undergoing relevant strategic changes. Indeed, more than half of the Fortune 1.000 companies in the U.S. regularly issue CSR reports and nearly 10% of U.S. investments are screened to ensure that they meet CSR-related criteria (Galema, Plantinga, & Scholtens, 2008). Furthermore, a growing number of firms worldwide have undertaken serious efforts to integrate CSR into various aspects of their businesses (Jo & Harjoto, October 2011). In a keynote speech to the Eastern Financial Association, Starks (2009) described a new acronym that has been developed to capture a company's corporate social responsibility activities: ESG (environmental, social, and governance). Starks referred to a 2006 survey conducted by Mercer Consulting in which investors were asked how important they viewed various ESG factors to be for investment. The percentage of survey respondents indicating that these factors were very important were, respectively, corporate governance (64%), sustainability (39%), employee relations (33%), human rights (26%), water (25%), environmental management (18%), and climate change (7%).

The link human capital establishes with sustainability, performance and value distribution, allied with the above quoted recent corporate efforts, leads this paper's motivations in analyzing: the mechanisms behind human capital's influence on performance and its importance as evaluative criteria.

Indeed, the firm's choices towards its direct stakeholders – in this case, employees (Girerd-Potin, Jimenez-Garces, & Louvet, 2012), should exert effects on different levels. On the one hand, from an internal perspective, it has implications in terms of the efficiency of the company's production as a team (Stout, 2002), but also in terms of how managers approach employee recruitment, retention and motivation as well as in the general conceptualization of Human Resource Management (HRM) as a vector of a firm's overall corporate strategy. On the other hand, externally, there is a clear impact on the perception of risk evaluated by the financial market and its investors which, consequently, affect the firm's stock return (Fama & French, 1992), market-to-book ratio (Galema, Plantinga, & Scholtens, 2008; Bird, Hall, Momentè, & Reggiani, December 2007) and cost of equity (El Ghoul, Guedhami, Kwokb, & Mishrac, September 2011).

Ultimately, this thesis aims to understand the managerial implications and meaning to investors of its findings.

The focus on Employee Relations is attributable to two main reasons: the crescent importance this area has been gaining in theory without consensual validity in practice and its highlighted position as a dimension of CSR. By focusing on CSR as a whole, one can involuntarily neglect contrary forces with inverse coefficients of impact acting separately and resulting in non-significant conclusions. For instance, using scores from the Ethical Investment Research Service of 2002 Bramme et al. (Bramme, Hoejmosse, & Marchant, November 2012) discover that UK companies with higher social performance scores see their returns affected by contrasting drivers. While the environmental and community involvement indicators exert a negative effect on performance, it is smoothed by a weak positive link with the employment indicator – translating nevertheless in an overall negative correlation. With a similar multiple dimensions analysis Galema et al. (Galema, Plantinga, & Scholtens, 2008) use KLD ratings as basis of regressions on individual stocks excess returns and the six rating dimensions individually. The authors discover that employee relations score is the only one to have significant positive effect on excess returns. These results are further corroborated by Statman and Glushkov (Statman & Glushkov, 2008).

Furthermore, in addition to the lack of consensus concerning the link between satisfaction and performance in practice, past research has left unattended two key issues: geographical and time differences.

On the one hand, past literature on the link performance-satisfaction has been focusing predominantly on the US Market. However, being satisfaction a multidimensional variable composed of explicit and implicit factors (Maslow, 1943); it is expectable that employees coming from different cultural backgrounds will weigh their “motivational factors” differently. On the other hand, job satisfaction and performance will always be subject of comparison among companies and, therefore, should be affected by external economic environment. This thesis aims at complementing a literature gap by comparing differences of performance between companies with high levels of employee satisfaction and their peers from several European countries both in growth and recession periods.

In addition, current research is still limited in what comes to the drivers of value creation in companies with outstanding employee relations. If studies have unveiled a positive link between employee satisfaction and financial performance, it implies that

there are gains to both employees and managers/shareholders. But to access its impact on the overall firm structure, we need to acknowledge if those gains are a result of a simple transfer of value between different stakeholders and shareholders or if they come from superior operational value creation processes. Hence the importance of undertaking deeper research into the drivers of abnormal operational performance.

Moreover, it is important to highlight throughout this research the benefits associated to Social Responsible Investment Funds. Over the past decade, socially responsible investments (SRI), frequently also called ethical investments or sustainable investments have grown rapidly around the world. SRI is an investment process that integrates social, environmental, and ethical considerations into investment decision making (Renneboog, Horst, & Zhang, September 2008). Indeed, the number of SRI Funds increased almost 90% in Europe in the last 10 years¹, making SRI Funds a more important player in the shaping of today's financial markets². These funds have not only increased their weight, but raised the issue of the existing level of correlation between SRI Screens and returns. Additionally, large institutional investors such as CalPERS are showing a preference for investing in firms that pursue specific socially responsible activities (Guenster, Bauer, Derwall, & Koedijk, September 2011). Given this, one can recognize that SRI Funds are prime vehicles of change that are leading firms to have even greater benefits in behaving socially responsible. Indeed, this serves to show that, although it is the aim of this thesis to focus on the operational performance of firms, leaders of change such as SRI Funds are opening a sea of new possibilities to firms with high employee relations (and other CSR criterion) through increased funds available to invest in these.

In addition, the contribution of further empirical research to this thematic addresses the existence of incomplete information (Merton, 1987), or supporting managerial myopia theories (Stein, 1988; Edmans, 2009), that advocate that the investor can only study a subset of the available universe due to these constraints. In this scenario, increased

¹ "Green, Social and Ethical Funds in Europe" – Vigeo 2012 Review

² This reshaping has not been conducted in the most peaceful environment, being an example of that the declarations of the former chairman of the Social Democratic Party in German, in April 2005, that strongly criticised private equity funds and other financial investors, calling them "locusts" who exert pressure in their function as shareholders on the management of the firm in order to maximise their return on equity in the short run before moving on to the next object (cf. Anonymous (2005), in "Towards a reconciliation of the shareholder- and the stakeholdervalue-approach: An empirical study of value creation in the international retail sector.", Andreas Venus, ESCP Europe thesis).

contribution to SRI screens emerge as a tool for, rather than excluding good investments, help investors focus on superior investments. Indeed, firm's concern for other stakeholders, such as employees, may ultimately benefit shareholders (Edmans, 2011). In fact, a good distinction in the way to approach this challenge was given by Smith (2003): "Under the shareholder theory, non-shareholders can be viewed as "means" to the "ends" of profitability; under the stakeholder theory, the interests of many non-shareholders are also viewed as "ends"" (Smith (2003), p. 87).

In a snapshot, the goal of this paper is four-fold: First, to contribute to present managerial, financial and CSR literature by investigating the link between job satisfaction and operational performance in a 9-year period – to address and overcome the path dependency of Human Resource Management Practices (Becker and Huselig, 1996) and the short-term intangibility of results created by human capital investment (Edmans, 2011). Secondly, to shed light over the mechanisms of value creation and operational gains that support differences in performance between firms. The research aims at analyzing the drivers of performance as well as uncovering secondary implications in terms of capital utilization and capital structure. Thirdly, to open a new tie of research on geographical differences of the link between job satisfaction and performance. This is done by focusing the analysis on companies from 15 European Countries. Finally, seeks to complement the gap in the literature on the effects of the economic external environment (economic growth or recession) on the abnormal operational performance of companies with outstanding levels of employee satisfaction.

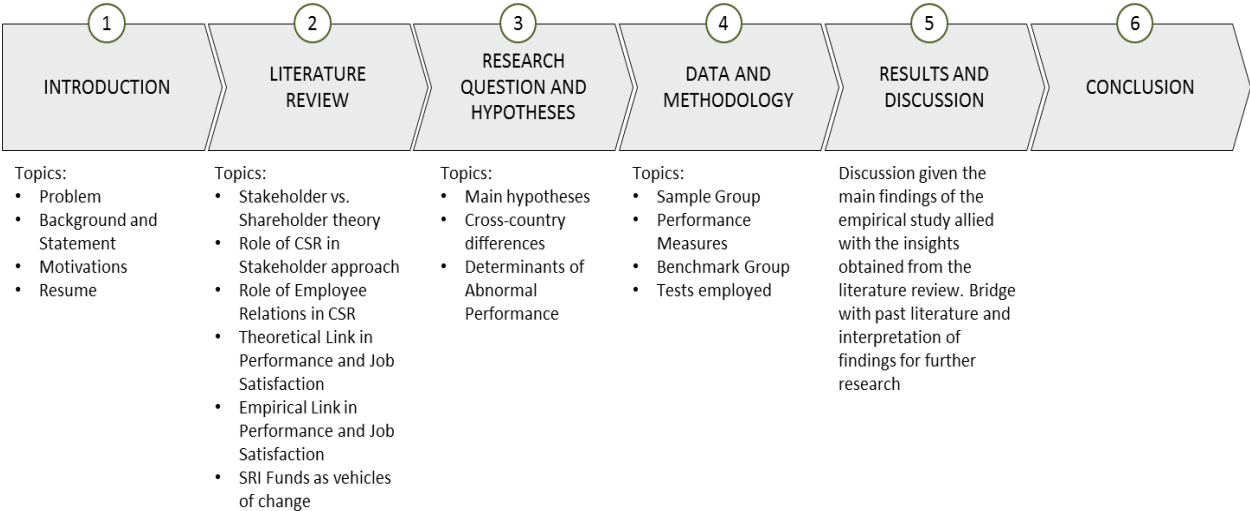
By performing a statistical study on the operational performance of the European companies that consistently rank among the list of "Best Companies to Work For" (released by the Great Place to Work® Institute³ in collaboration with national entities) and their peers, along with a regression on each sub-sample to analyze the drivers of performance, we find that companies with superior levels of employee satisfaction enjoy an abnormal operational return (measured by EBITDA/Assets) of 6.5% between 2003-2011 against their peers. A result that is significant (at a level of 1% significance) and robust to a diverse set of tests and controls. Indeed, the operational abnormal return

³ This list has been headed by Levering and Milt Moskowitz throughout its 28-year existence, and is compiled by the Great Place to Work Institute® in San Francisco. In 2002, the European Commission engaged the Great Place to Work® Institute to initiate a government-sponsored Best Companies list competition in some 15 European countries

prevailed in different times, presenting a difference of 6.97% and 5.9% at a 99% confidence level during years of economic growth and recession, respectively. Therefore, based on this sample, “Best Companies to Work For” experience higher value creation in terms of operational gains than their control firms.

This paper is divided into five parts: the first part, Section 2, covers the main literature regarding stakeholder theory in general, its connection with CSR and the privileged position of the dimension of employee relations, focusing on its link with performance in theory and in practice (this section is concluded with a brief contextualization of SRI as a vehicle of change). Section 3 presents the research questions and hypotheses that will serve as cornerstone of future analysis. In addition, Section 4 will focus on the describing the data selection and sampling process and research methodology employed. The main findings will be evidenced and interpreted in Section 5, which also includes a discussion, statement of limitations and managerial implications. Summarized findings and closing clarifications concerning the results and future research opportunities are exposed in the final section of this paper.

Figure 1 – Thesis Resume



2. Literature Review

A careful analysis of the literature will be conducted in order to obtain a clear understanding of all issues surrounding the topic under study. As there are innumerable issues involved in the analysis of the issue under study, several subsections will be created to allow for a more in-depth focus on all relevant research influencing the subject.

The first part of the literature review, section 2.1, will be dedicated at analyzing the foundations and available theory underneath the relationship between shareholders and stakeholders. Indeed, the shareholder vs. stakeholder approach has gained a highlighted position under an everlasting debate (since the year 1932, when the Harvard Law Review published a debate between Adolph Berle and Merrick Dodd on the subject of the proper purpose of the public corporation (cf. Stout (2002), p. 1189)). This topic assumes particular interest in order to layout the implications and mechanisms that different approaches towards stakeholders may result in the final firm value.

Secondly, in section 2.2, the revision will walk towards a more narrowed field of study by focusing on Corporate Social Responsibility within the characterization of stakeholders. In the end of the section, we will close with a final deepening of CSR specifically into the dimension of Employee Relations and Job Satisfaction, as a way of concluding a general contextualization into our prime study subject. By doing so, we expect to have defined the position of employees as direct non-financial stakeholders (Girerd-Potin et al., 2012) within a firm and their overall importance in the subject of Corporate Social Responsibility.

After understanding the universe surrounding our main dimension (Employee Satisfaction), we aim at covering the theoretical explanations concerning its impact on Firm Performance in Section 2.3. By reviewing the theoretical link between Human Capital and Firm Performance, it will be possible to establish a parallel with Section 2.4 that will focus on the present empirical evidence of the previous presented theories.

Finally, the literature review will conclude with an analysis of the SRI panorama on today's financial markets and the role of screening measures, compared against Traditional Portfolio Theories (Markowitz, 1959).

2.1 The Relationship between Shareholders and Stakeholders

The historical foundations of the Stakeholder-Shareholder approach debate date to the year of 1932, at the moment of the renowned debate between Adolph Berle and Merrick Dodd over what was the proper purpose of the public corporation (cf. Stout (2002), p. 1189), published by the Harvard Law Review. At the time, the two main parties of this discussion projected the topic for an 80 –year lasting discussion.

On the one hand, Berle (1932) defended that the sole purpose of the corporation is to make money – a view that gained further projection by Milton Friedman’s publications, as referred in the beginning of section 1. On the other hand, Dodd (1932) immortalized the “view of the business corporation as an economic institution which has a social service as well as a profit-making function” (Dodd (1932), p. 1148). Moreover, over the years, with the growth of large publicly traded companies and a rising demand for transparency and disclosure in contrast with crescent social challenges, the “Stakeholder vs. Shareholder” argument gained particular relevance, being its implications analyzed throughout many parallel fields of study: Law (Winkler, 2004), Psychology (Anderson et al., 2001) and Business/Finance (Stout, 2007; Charreaux and Desbrières, 1998; Moussu, 2000).

2.1.1 Conflicting theory

There is a wide range of literature supporting each of the approaches individually where the theory of the firms distinguishes different topics related to the *Shareholder Approach* – Classical Property Rights Theory (Alchian and Demsetz, 1972), Modern Property Rights Theory (Grossman et al., 1986), Principal Agency Theory (Berle and Means, 1932; Jensen and Meckling (1986); as well as the *Stakeholder Approach* – Network of Specific Investments (Rajan and Zingales, 1998, 2001; Holmström and Roberts, 1998); Implicit Contracts (McNeil, 1974; Moussu, 2000). However, this section will focus on the relationship between both parties and how different choices may impact the final result.

2.1.2 Shareholder - Stakeholder Value Complementarity

The most common argument among defendants of the shareholder-value-approach is that the maximization of all stakeholders interests is already accounted in the process of maximization of shareholder value as it is based on explicit contracts between all relevant actors that would not be generally accepted if they were not maximizing everyone’s utility. Indeed, Schiltknecht (1996) argues on the basis of Rappaport (1986)

“that the stakeholder-value-approach was even dispensable, because the interests of all stakeholders other than shareholders had already been accounted for, before the latter are finally remunerated”. Additionally, some financial advisors advocate that stakeholder-value can be obtained by focusing first in obtaining high returns (shareholder-value) and then donating the created-value (profits) to charity. However, as one socially responsible investor remarks: “If your investments cause harm and you try to alleviate that harm by contributing your profits you do no more, and probably less, than negating yourself” (Statman 2008).

2.1.3 Team Production

a. Definition

There is generalized consensus that the creation of value within a company requires inputs from all stakeholders – employees, suppliers, managers, etc. – in accordance with Porter’s Value Chain (1985), the resource based view on the firm (cf. Barney (1991)) or more recently the Dynamic Capabilities approach (Teece et al., 1994, 2009). Indeed, based on these factors, we highlight Stout’s conceptualization of the value creation process as a *Team Production* (Stout, 2002).

Thus, if the elements of the team feel they are not being rewarded accordingly to their level of effort, this is, if their marginal utility does not match their benefits, they will restrain themselves from this team productive chain. Indeed, Blair and Stout (1999) argue, that “strict shareholder primacy ... may ineffectively discourage non-shareholders constituents from making the types of firm-specific investments that can be essential to a company’s success” (Stout, 2002). So, if there is an anticipation from different stakeholders that the corporate decision matches a shareholder-value-approach concerning the distribution of wealth and will lead to the appropriation of their benefits by shareholders, consequently failing to reward the specific investments they are incurring in, it will result in the stakeholders *ex-ante* refraining of specific investments – “the ideal rule of corporate governance, at least from an efficiency perspective, is to require corporate directors to maximize the sum of all the risk-adjusted returns enjoyed by all of the groups that participate in firms” (Stout, 2002). Furthermore, Stout concludes that “shareholders as a class may be served best not by shareholder primacy, but by what Stephen Bainbridge has called “director primacy”” (Stout, 2002), as a way to

prevent that, in the short run, directors distribute value that will not maximize the value of all stakeholders.

b. The Role of Implicit Claims in Team Production

All human relations are governed by contracts. The analysis may reside in their kind: either implicit or explicit⁴. Hence, within the scope of the firm, the relationship between different stakeholders appears to be mainly governed by implicit contracts - “Ceci est particulièrement vrai pour la relation d’emploi, tant parce qu’il existe de nombreuses imperfections dans le fonctionnement du marché de travail ... , que parce que l’association continue d’un employé et d’un employeur peut produire des surplus spécifiques importants (accumulation de capital humain spécifique, d’informations spécifiques, incitations notamment)” (Moussu, 2000). Additionally, the nexus of contracts ruling human relations within a firm apply not only to the relationship of the firm with its employees but also towards its customers and suppliers - “En effet, une bonne réputation permet de sécréter des quasi-rentes lorsque l’information est imparfaite [C. Shapiro 1983] et, donc, de créer de la valeur. Par ailleurs, l’idée même d’un nouveau produit et les efforts associés à son lancement requièrent l’établissement d’une relation d’emploi de long terme fonctionnant comme un accord implicite. La nature des relations de l’entreprise avec ses clients et ses employés est donc à l’origine de l’opportunité d’investissement et de sa valorisation” (Moussu, 2000).

The acknowledgment of such perspective carries, therefore, great impact in the way we recognize stakeholders’ claims. Indeed, different stakeholders are not only interested in satisfying their explicit contractual obligations, but retrieve also value from the satisfaction of their implicit claims. Thus, the level of specific investments stakeholders will choose to carry towards the firm will depend on the utility they retrieve from both implicit and explicit claims. In practical terms, this launches the basis for the importance of competitive bonus schemes, non-cash benefits, and investments in a firm’s corporate culture, among others. Indeed, employment contracts cannot specify every detailed of the working relationship, especially those concerning work environment. Hence the importance of implicit claims expressed through a firm’s reputation in addressing this

⁴ We can go further back in time and base such views in the work of Rousseau (1762), where in order to accomplish more and remove himself from the state of nature, “man must enter into a Social Contract with others”.

gap of information. By establishing this bridge, implicit contracts assume a preponderant role in the repartition of value towards employees. Indeed, this applies as well to the importance of implicit schemes such as expenses for publicity and reputation building in general, towards clients. So, there is theoretical base for how a company's strategy concerning its repartition of value may affect the level of investment stakeholders are willing to commit in pursuing the creation of value.

c. Challenges

According to the referred structure, the role of managers will be then to assure the maximum level of welfare among the different stakeholders of the firm (employee satisfaction, suppliers' welfare, actualized managers) so that they contribute with the maximum specific investment possible in the creation of added-value. However, if we delineate these functions as primary responsibilities of managers, an important issue of fair evaluative criteria arises. Indeed, in line with Roe (2001), Stout reasons that because it is easier to measure shareholder value than stakeholder-value, "shareholder primacy is a second-best solution that is good for all the stakeholders in the firm, because it limits what might otherwise be the runaway agency costs that might be incurred by all if directors were not held to a clear and easily observed metric of good corporate governance" (Stout, 2002).

Nevertheless, as Charreaux and Desbrières denote: "(L)es actionnaires, notamment lorsqu'ils sont dispersés, ne sont pas toujours les mieux placés pour exercer au moindre coût la fonction de surveillance des dirigeants, car ils n'ont pas un accès à l'information interne, en liaison directe avec le processus de création de valeur" (Charreaux and Desbrières (1998). Thus, the proper way on how to evaluate the total welfare of all different stakeholders still remains as a not-consensual issue.

Although these are some limitations to how the financial architecture of firms can better extract the marginal effort from all its participants, they don't imply or impact the relation between shareholder value and stakeholder value and the implicit contract underneath the organizational corporate veil. Therefore, although it is essential to acknowledge all these mechanisms and limitations, the foundations of stakeholders' role in the company remain.

2.1.4 The Disciplinary Role of Debt in Shareholder Value Maximization

Following the problematic of assuring commitment and effort in project management to managers and employees, we find it fundamental to recover Jensen's (1986) cash flow theory. In times marked by a Leveraged Buyout boom, Michael Jensen proposed a new rationale for borrowing on the premises that managers often made wasteful investments with a company's free cash flows. Cash flows being here defined as the operational cash flows over which a manager or an employee has full discretionary spending power. According to this line of research, managers and employees that dispose of large cash flows and little or no debt, have such a solid cushion against mistakes that are negligent in their decisions and have no incentive to be efficient in either project choice or project management. Hence, one way of imposing discipline in this context was to force them to borrow money as debt carries an obligation of paying both interests and the principal⁵.

The underlying assumptions of this avenue of research are that managers will feel tempted not to maximize the interests of shareholders without a coercive incentive such as debt. The same line of reasoning can be applied to any employee of a firm, which in a presence of a large cushion of cash-flows at his disposal; will neglect managing it efficiently to maximize the owner's value unless there are some forced mechanisms that impede him of not doing so.

The corollary of this argument further opens interesting questions related with stakeholder vs. shareholder theory and corporate governance. If managers left on their own tend to prefer to carry less debt in order to create for themselves a higher margin of error, than it would be expectable that debt ratios, in countries where stockholder power to influence management is minimal, would be much lower than what is optimal for firms as both managers and employees tend to enjoy financial slack.

There is a vast string of research that attempted to verify this disciplinary role empirically. Bhidé (1993) notes that the returns on equity of firms that are acquired through an hostile take-over are 2.2% below of their peer group and Palepu (1986) presents evidence that target firms in acquisitions carry less debt than similar firms that are not taken over. Palepu (1990) also presents evidence of modest improvements in

⁵ The difference between the forgiving nature of the equity commitment and the inflexibility of the debt commitment has led some to classify equity as a "cushion" and debt as a "sword"

operational efficiency at firms involved in Leveraged Buyouts, as do Kaplan (1989) and Smith (1990).

However, it is important to refer how this evidence can also be explained by an innumerable amount of different hypothesis such as changes in management and others. Nevertheless, it raises an important issue about the disciplinary role of debt in safeguarding efficiency of managers and employees within firms that was largely accepted for decades.

In the end, managers and employees are the ones being subject to the role of debt. So, from another perspective, Maksimovic and Titman (1991) find that firms with higher leverage can see their ability to attract employees, suppliers and customers affected as leverage increases the doubts concerning the firm's ability to honor its commitments. In addition, Myers (1977) stated that, when analyzing agency costs and the optimal capital structure, firms with high debt outstanding have incentives to pass up valuable investments opportunities that could make a positive net contribution to the market value of the firm. In this case, if we consider the investment in human capital as a valuable investment, the argument of Myers (1977) could mean that by having a higher debt ratio, although companies will be coercing their managers to be more efficient, they will underinvest in the formation of these managers and the attraction of future talent, playing a contrary force to the efficiency that the disciplinary role of debt aims to reach.

In this thesis, research will be conducted to verify the hypothesis of companies requiring debt to guarantee efficient managers and employees allied with an analysis of other alternatives firms might have at their disposal to discipline workers and managers. Indeed, this addresses a gap in the literature concerning the efficiency of different disciplinary or non-disciplinary choices in assuring efficiency in project decisions and project management.

2.2 Employees as Stakeholders - Job Satisfaction and Employee Relations within Corporate Social Responsibility

After building a solid contextualization on the concepts of the stakeholder theory against the shareholder value approach and laying out the general principles of value creation associated with it, our investigation will focus on a second layer of the stakeholder's

universe: Corporate Social Responsibility (CSR). CSR involves firms considering the interests of stakeholders other than shareholders, such as employees, customers, or the environment (Clarkson, 1995; Donaldson and Preston, 1995; Freeman 1984; Shrivastava, 1995). Past literature and empirical results on Corporate Social Responsibility and its impacts are frequently different across countries, time periods, assets, portfolios and performance measure definitions. To overcome the barrier of mixed information, the literature has moved forward towards the examination of CSR by different independent dimensions. The underlying insight is that the different dimensions of CSR do not produce necessarily uniformed effects. Hence, literature has defined CSR around five to six main dimensions that vary across different entities and researches.

Figure 2 - Corporate Social Responsibility dimensions across different measures

	KLD Ratings	Vigeo Ratings	GES Investment Services
Dimensions	Employee Relations and Satisfaction		
	Environment	Environment	Environment
	Corporate Governance	Corporate Governance	Suppliers
	Community Involvement	Community Involvement	Community Involvement
	Product	Business Behaviour	
	Human Rights	Human Rights	
	Diversity		

Indeed, employees assume a key role in all major Corporate Sustainability Measures as they are key protagonist drivers of a firm’s overall business strategy. This kind of CSR is viewed many times as “instrumental stakeholder management” (Jones, 1995) and utilized with the aim of making use of stakeholder’s interests to improve brand image (Moskowitz, 1972), reduce the likelihood of negative regulatory actions (Freedman,1984; Porter & Van der Linde, 1995), attract and retain high quality employees (Turban & Greening, 1997; Greening & Turban, 2000), and attract capital from socially responsible investors (Cheng, Ioannou, & Serafeim, 2011). This view can be

joined with Cornel & Shapiro's (1987) perspective that of how CSR improves the value of a firm's implicit claims with its stakeholders.

Given all of the above, this thesis will focus on employee relations as the main subject of research. The literature concerning the relationship between CSR and firm value strongly parallels the literature related to Employee Relations and firm value.

2.3 The link between Human Capital, Job Satisfaction and Performance

The relationship between Human Capital and Performance has been documented by several areas of study: Management, Psychology, Economics and others. Although there are theoretical grounds that justify it in theory, it is extremely hard to establish a clear link in practice. This section will provide a contextualization of the theoretical findings so far that will serve as basis of knowledge to understand this study's contribution to the literature.

2.3.1 Impact of Human Capital in Firms in Theory

Although it may seem intuitive that employee satisfaction correlates positively with performance and production outcomes, there is quite some contradictory literature on the subject. Indeed, in today's fast-changing business environment, firms are constantly changing their business models to adapt to the impact of technological development on their *modus operandis*. In fact, many traditional theories (Taylor, 1911) are focused on the principle of cost-efficiency in the capital intensive firms of the 20th century. Thus, as nowadays the world experiences a wave of technology and innovation as cornerstones of the firm's operating model, these theories are not always supported. In fact, to provide the required level of services in the field, companies are requiring progressively more human capital (Zingales, 2000).

On the other hand, a firm's responsibilities are met by "individual human actors" who manage in a changing environment that is full of choices (Wood, 1991). So, the actions managers take regarding their relationship with direct stakeholders (Clarkson, 1995; Freeman 1984) are subject to human relation theories (e.g. Maslow, 1943; Herzberg, 1959; McGregor, 1960) and will impact how these employees decide to commit to the firm. Such shift in the perception of the relationship is leading to a vision where

employees are seen as key organizational assets, rather than expendable commodities (Rajan and Zingales, 1998; Carlin and Gervais 2009; Berk, Stanton, and Zechner, 2010).

In addition, the resource-based view (RBV) of the firm (Barney, 1986; Wernerfelt, 1984) argues that firms develop sustainable competitive advantage by building resources that are valuable, non-imitable and/or non-replicable. However, in the modern industry that relies heavily on human capital, there are few barriers impeding employees to leave the company, which limits the concepts of non-imitable or non-replicable (as employees can simply take their knowledge to other companies).

Although there are several mechanisms that can be used to analyze the manager-employee relationship and several tools to influence it – announcement of pay increases (Abowd, 1989); management of minorities and women (Diltz, 1995); family benefits (Diltz, 1995); Employee involvement programmes (Gorton and Shmid, 2004); it is possible to distinguish two main channels through which the building of a valuable and non-imitable resource base can occur: Attraction and Motivation/Retention:

2.3.1.1 Attraction

On a primary level, the actions of an organization towards its stakeholders serve as a signaling to the market. Indeed, as applicants have incomplete information about firms, they interpret signals as information (Breaugh, 1992; Rynes, 1991; Spence, 1974).

People feel attracted to organizations that they view as a stand-flag of their own values and norms (Chatman, 1989). Montgomery and Ramus (2007) find that the CSR aspects of Ethics and Caring about Employees weights far larger in MBA job choice that they anticipated, after surveying 759 MBA graduates and finding that most would be willing to sacrifice financial compensation to work for a socially responsible employer. Thus, the firm's Corporate Social Responsible policy towards stakeholders will be seen as a signal of the norms in place and will likely influence applicants' perception of the attractiveness of the organization as an employer.

Moreover, social identity theory suggests that people classify themselves into social categories depending on several factors and the insertion in such social categories influence how individuals conceive themselves – being one of these factors the organization they work for (Ashforth, Mael, 1989; Dutton, Dukerich, Harquail, 1994).

Indeed, scholars have suggested that CSP may provide a competitive advantage to firms by attracting a larger pool of candidates (Davis, 1973; Fombrun & Shanley, 1990).

2.3.1.2 Motivation / Retention

First of all, a satisfying workplace can foster job empathy (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001) and ensure that talented employees stay with the firm. Other management scholars suggest that if employees feel good about their jobs, the positive sense of well-being will cause them to work more effectively (Schneider & Bowen, 1992).

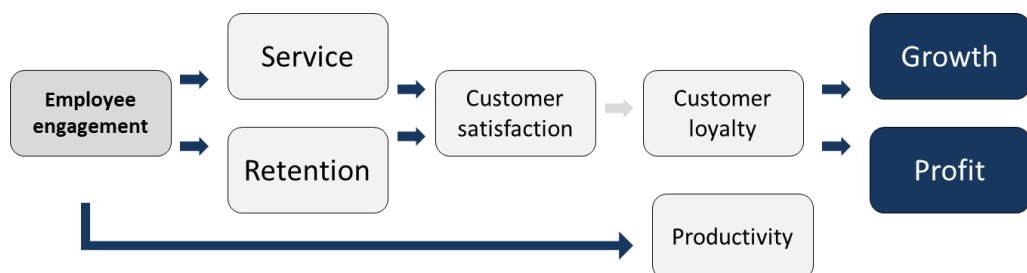
Moreover, the efficiency wage theory (Akerlof and Yelle, 1986) states that excess satisfaction can increase effort, because the worker wishes to avoid being fired from a satisfying job (Shapiro and Stiglitz, 1984) or views it as a gift from the firm and responds with a gift of increased effort (Akerlof, 1982). In this section we are also taken back once again to the role of implicit claims and employee's specific investment. Building over McGregor's sociological theory, one can claim that that satisfied employees identify with the firm and internalize its objectives, thus inducing effort (McGregor, 1960).

Maslow, (1943) and Herzberg (1959) argue that money is only an effective motivator up to a point: once workers physical needs are met, they are motivated by non-pecuniary factors such as job satisfaction, which cannot be externally purchased with cash and can only be provided by the firm.

2.3.2 Customer Satisfaction

Moreover, Simon and DeVaro (2006) find that one of the major channels through which job satisfaction in "Best Companies to Work For" reflects in firm performance is through customer satisfaction. This relationship was also illustrated by Kevin Kruse (2012) in what was designated as the "Employee Engagement 2.0" model.

Figure 3 - "Employee Engagement 2.0" Model



(Kevin Kruse, "Employee Engagement 2.0" model, 2012)

Indeed, customer satisfaction is obtained through more positive employee attitudes (George, 1991; Liao & Chuang, 2004) and lower defect rates or higher customer service levels. Hence, Simon and DeVaro (2006) found in their empirical research, using a sample of “Best Companies to Work For”, that when customer satisfaction increased by one point, the firm’s ROA increased by about 0.3 percentage points per year over the next three years.

2.3.3 Challenges

There are difficulties in identifying clearly satisfaction effects on firm performance that must be taken into account before going deeper into the analysis of the empirical background and methodology of this thesis.

The first limitation to this link is what Nelling and Webb (2009) referred to as a “virtuous cycle” of reverse causality. If the positive correlation between employee satisfaction and firm performance derives from reverse causality, it is extremely difficult to guarantee one of two situations: If the abnormal performance of a firm is directly caused by the satisfaction of its employees (through the channels seen before) or if the high levels of satisfaction of employees is a consequence of the firm performance in the previous year (that, for example, allowed managers to reward employees more generously in terms of wages and other benefits). Even if we aimed at using a longitudinal study that lag the satisfaction measure to address this problematic (by relating satisfaction in year N to performance in year $N+1$) and advocating that the causing element was satisfaction as it is the preceding one, it would continue to be prone to criticism if satisfaction in N was coincident with performance in N , which would explain performance in $N+1$ as performance is relatively persistent, *ceteris paribus*. In addition, the correlation between both could come from a third omitted variable (performance or satisfaction in past years).

Secondly, there are challenges concerning the difference in aggregate level of analysis and aggregate level of performance drivers. In this case, a firm whose employees show an enormous job satisfaction might not be able to translate it into firm performance if the performance of the firm is highly dependable on the job of a few higher level managers (which don’t share the same job satisfaction). Thus, there is a difficult balance between looking at job satisfaction at an individual level or an aggregate level to explain firm performance. Furthermore, there are several dimensions – productivity, turnover,

absenteeism – associated with job satisfaction that are hard to be analyzed independently and its implications on performance.

In conclusion, there are challenges in the identification of the link between Employee Satisfaction and Performance that have to be clearly understood and taken into account during the analysis of the study in place.

2.4 Empirical Studies

The empirical documentation of the link between CSR, Employee Relations and Performance in practice is much more contradictory. Indeed, two separate distinctions can be made to obtain a clearer picture of the research done so far: the existence of differences depending on the time period of the study and dissimilarities depending on the subject (CSR as a whole or employee relations specifically).

2.4.1 Time Periods

The first focus will be on differences in time periods. The earliest researches in the field of job satisfaction's impact on performance refer to meta-analysis by Brayfield & Crockett (1955) with the conclusion of "minimal or no relationship". It was followed by further investigation by Vroom (1964) and Locke (1965) with similar results and conclusions. These conclusions stayed undisputed by further research during the following years and were even further enhanced by Iaffaldano & Muchinsky (1985) who found a mean correlation of only 0.17 between the two variables, classifying it as an "illusionary correlation" and the unveiling of a "management fad". This meta-analysis proved highly influential on management thinking for the rest of the millennium. In particular, it was widely cited as evidence that there is no link between satisfaction and performance.

However, recent studies have found very different results. The main difference among past researches relates mainly to the variables used to identify job satisfaction. As far as Great Place To Work® Institute's Ranking Lists are concerned, Edmans (2011) finds that firms with a high level of employee satisfaction (firms belonging to the 100 Best Companies to Work for in America) earned an annual abnormal return of 3.5% from 1984 to 2009. He interprets his findings as a market failure to fully incorporate intangible assets into stock valuations, even if, all things being equal, these firms exhibit

greater market values (as measured by the market-to-book ratio, the price-to-earnings ratio and the ratio of aggregate value to EBITDA). Lau and May (1998) find that these companies in the 1998's list enjoyed greater sales growth and higher ROA than firms in the S&P 100 (that are not on the list). Filbeck and Preece (2003) find a statistically significant increase in a firm's stock price following the announcement that it had been named to the 1998 Fortune list. Moreover, they find some evidence that the Best Companies enjoyed higher returns than a matched sample of firms that did not make the list. Similarly, Fulmer et al., (2003) find that the 100 Best Companies enjoyed higher stock prices and better financial performance than a matched sample of firms.

Using other measures of job satisfaction, such as the concept of happiness/positive affect, Barsade & Gibson (2007), Fisher (2010) and Lyubomisky, King, & Diener (2005) find a positive link between happiness levels and individual success. Nevertheless, these studies were subject to criticism for focusing on the individual and not on the firm as an aggregate level of several employees. Indeed, a high satisfaction of employees in lower job positions may not lead to improved operational performance if the overall firm aggregate satisfaction is inexistent. The study of Ostroff (1992) and the meta-analyses of Harter, Schmidt, & Hayes (2002) and Harter, Schmidt, Asplund, Killham, & Agrawal (2010) argue that the organization is the appropriate unit of analysis as it takes into account interactions between workers. All three find stronger positive correlations than individual-level analyses. While the above analyses investigate performance, Allen, Bryant, & Vardamam (2010), Griffeth, Hom, & Gaertner (2000), and Lee, Mitchell, Holtom, McDaniel, & Hill (1999) show a negative link between satisfaction and employee turnover, providing evidence for the retention benefits of job satisfaction.

2.4.2 CSR Dimensions

In addition, the same research can be seen from the perspective of employee relations as a CSR activity. Indeed, employee satisfaction is present as a variable in almost all international CSR Ratings. Past research on the link between CSR and performance is much more contradictory and several tests yield different results. Jiao (2010) summarizes the reasoning behind the different results, from a finance perspective, in a very precise way: "A positive effect of CSR on corporate performance is consistent with the view that CSR represents an investment in intangible assets, such as reputation and human capital, which contribute to enhancing firms' competitiveness. A negative effect of

CSR on performance is consistent with the view that CSR represents private benefits (e.g., respect, job security, public image) that managers extract at the expense of shareholders". Furthermore, the effects of CSR activities and scores have been studied using several different dependent variables, being the most relevant a company's returns and financing costs – both impacting firm value.

Supporting these contrasting perspectives, Feldman et al. (1997) and Guenster et al. (2010) provide evidence indicating a positive relation between corporate social performance and firm value due to a diminished perception of risk by investors; Orlitzky et al. (2003) show a positive correlation between a firm's social and environmental rating and its financial performance. Interestingly, using scores from the Ethical Investment Research Service of 2002, Brammer et al. (2006), discover that UK companies with higher social performance scores see their returns affected by contrasting drivers. While the environmental and community involvement indicators exert a negative effect on performance, it is smoothed by a weak positive link with the employment indicator – translating nevertheless in an overall negative correlation. With a similar multiple dimensions analysis, Galema et. al (2008) use KLD ratings as basis of regressions on individual stocks excess returns and the six rating dimensions individually. The authors discover that employee relations score is the only one to have significant positive effect on excess returns. These results are further corroborated by Statman and Glushkov (2009). Moreover, Hamilton et al. (1993) find no significant difference in returns between SRI Funds and Conventional Mutual Funds, similarly to Nelling and Webb (2009) that conclude the inexistence of any link between CSR activities and financial performance.

The difference in results depending on the dimension of CSR used is well summarized by Girerd-Potin, Jimenez-Garces Sonia, & Louvet Pascal (2012) stating that negative scores are usually compensated by significant risks premiums in the market and these diverge expressively depending on the dimension analyzed: "The average premiums over the period 2003-2010 are larger for the components "direct non-financial stakeholders" and "financial stakeholders" than for the component "indirect stakeholders" ".

2.4.3 The Future: Cost of Equity

The summary of different risks premiums relates to another extremely important feature of previous and future research: forecasting the cost of equity in relation to present social ratings – “The cost of capital could be the channel through which capital markets encourage firms to become more socially responsible (Heinkel et al., 2001).”

It is arguable, however, that in the future if the market is in equilibrium and shareholders and managers rationally have the same goal of maximizing firm value, the costs, in a given sector, for a company to be classified as a socially committed will be the same across that industry. Thus, leading to the moment where, at equilibrium, no firm will take advantage of a change in its social status to become more socially responsible.

Nevertheless, presently, research has shown that firms can benefit from a privileged cost of equity by investing in CSR through two main channels: Firstly, by increasing the relative size of a firm’s investors’ base – in accordance with the capital market equilibrium model of Merton (1987). Secondly, by lowering a firm’s perceived risk. As far as the second is concerned, ElGhoul et al. (2011) and Gregory et al. (2010) find evidence of better access conditions in terms of cost of equity to CSR firms, especially concerning employee ratings.

Finally, Salaber (2007) argues that investors’ perception of strong versus weak CSR firms is shaped by a country’s culture and religion and leaves an open gap for future study. This thesis seeks to answer that demand to a certain point, by being pioneer in focusing the analysis on the performance of Best Companies in 15 European Countries throughout a study period of nine years.

2.5 The role SRI Funds and their Performance

“SRI is a generic term covering ethical investments, responsible investments, sustainable investments, and any other investment process that combines investors’ financial objectives with their concerns about environmental, social and governance (ESG) issues.” (Eurosif, SRI Study 2008).

Socially Responsible Investments Funds assume a particular interest in the subject of this thesis. They possess not only superior interest in the performance of companies of

excellence in terms of social ratings (where for the purpose of this research the employee dimension is highlighted) but they constitute as well a prime vehicle of leading change in contributing for the dissemination of social best practices among companies. Hence, it is fundamental to understand SRI Funds as leading conductors in this area and how the research results can be of use to them in leading change.

The concept of Socially Responsible Investments (SRI) has been receiving an increasing interest in academic research and in literature. Accompanying this recent trend, a significant number of socially responsible mutual funds have been created worldwide. According to Eurosif, the total SRI assets under management (AuM) in Europe have increased from €2.7 trillion in 2007 to €5 trillion in 2009. This represents a growth of about 87% over two years or a compound annual growth rate of 37%, clearly outperforming the mainstream funds in every asset class.

This growth has been particular relevant in Europe, the geographical target of our analysis. SRI Funds in Europe have increased on average about 15% yearly with particular emphasis on the years of 2008 and 2009 (after the financial crisis) where these funds gained a relevant boost. Furthermore, as in our subject of analysis, there are interesting differences among different European countries. These differences serve as a first and raw indicator that the approach to Corporate Responsibility varies among European countries – a fundamental starting point of analysis of this thesis and a current literature gap.

Chart 1 - Number of SRI Funds in Europe, cumulated, from 1999-2012
 (Source: Eurosif)

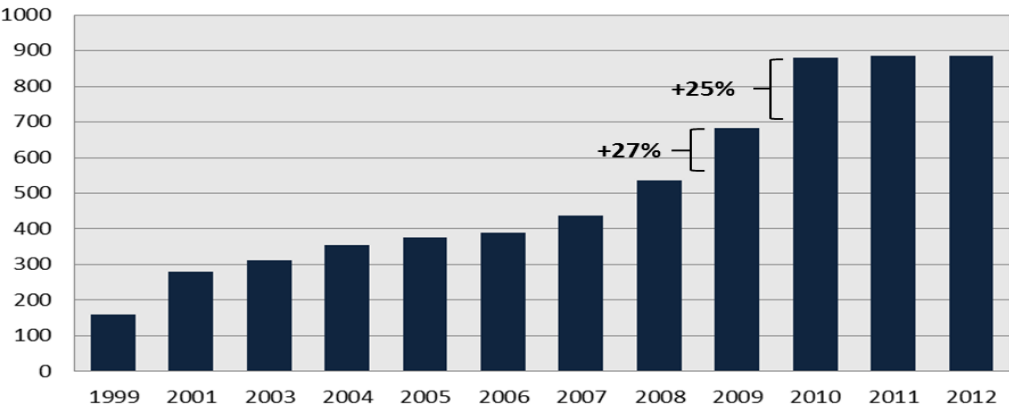
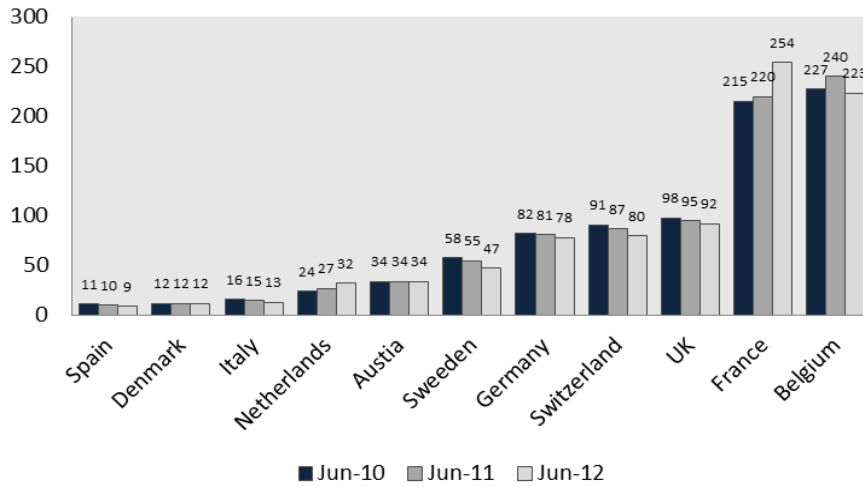
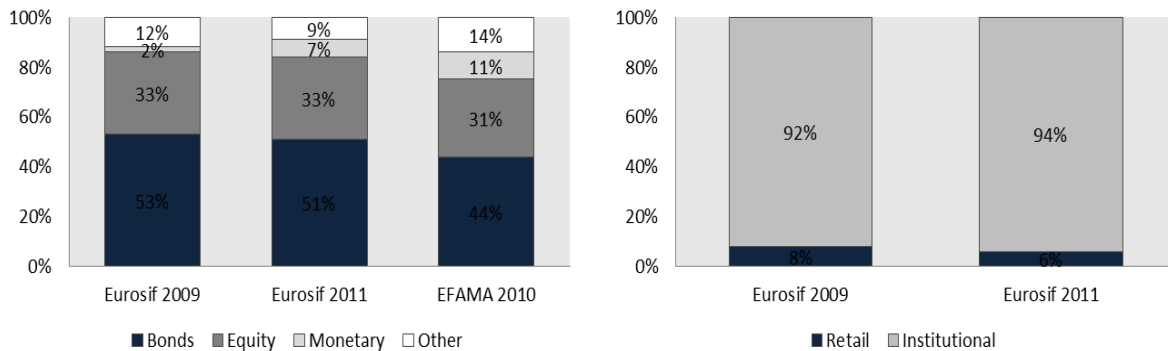


Chart 2 - Number of SRI Funds in Europe, by country, from 2010-2012
(Source: Eurosif)



By breaking even further the constituent components of SRI Funds, one can verify that in Europe they still assume a highly institutional predominance. On the other hand, it is important to notice how they have been focusing increasingly on Equity, translating into higher financing possibilities for companies that comply with these criterions.

Chart 3 - Breakdown by Type of Investor Asset Allocation of European SRI Funds
(Source: Eurosif)



The financial performance of socially responsible funds provides as well a partial answer to the classical belief that ethical standards are inconsistent with the wealth maximization paradigm used in mainstream finance (Wood, 1987) and can be compared to the literature on the link between CSR and operational performance – although with

adjustments for the inclusion of risk. As a contextualizing investigation, it is relevant to verify how, theoretically, portfolio theory advocates that the addition of constraints to the diversification of freedom will inhibit the creation of the optimal portfolio (Markowitz, 1952). In SRI, as the investments universe of selection is restricted, investor will abdicate from the potential for diversification that an unconstrained portfolio shows, which will be translated into lower risk-adjusted returns (Rudd, 1981 and Grossman and Sharp, 1986). As so, the portfolio theory theorizes that socially screened portfolios imply a lower financial return.

Contrary to these arguments, upholders of SRI defend that firms which engage corporate and social responsibility (CSR) programs will benefit from improved shareholder value in the long-run, although stock markets may undervalue CSR in the short-term. The reason that lies under this plea is that higher levels of CSR are an evidence of high quality management practices and may reflect comparative advantages over the less responsible firms.

In conception, Socially Responsible Funds (SRFs) invest according to social, ethical and non-economic guidelines. Generically, these investments may consist of funds that are screened according to an inclusion criterion (positive screens), an exclusion criterion (negative screens) or both (composed screens).

Proponents of such funds (Camejo 2002; Harrington 1992) believe it is possible for investors to "do well" socially while also "doing good" financially. They suggest that socially responsible investments may produce higher risk-adjusted portfolio returns relatively to using all available stocks in the equity universe (Guerard 1997a, 1997b).

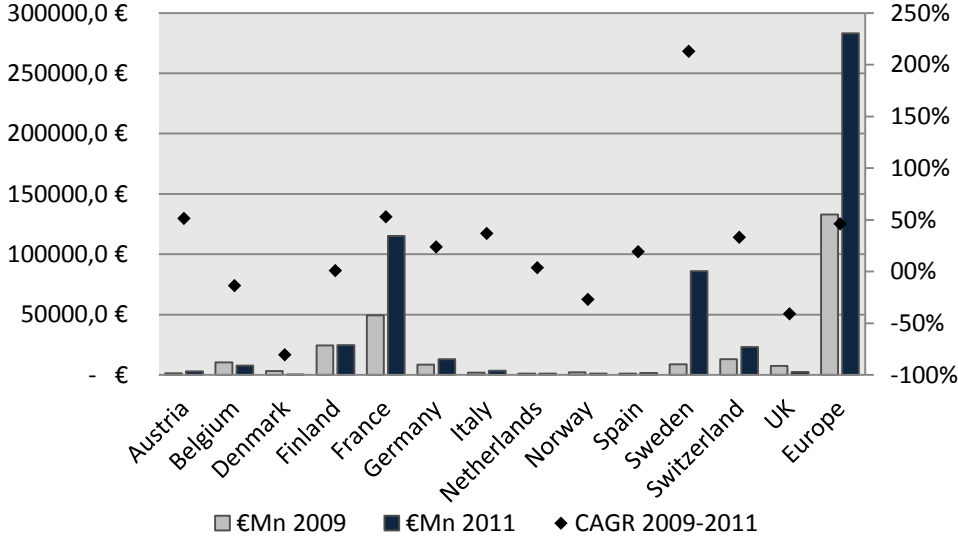
But there are also antipodal opinions. For example, Kurtz (1997) suggests that socially responsible investments may be thought of as a trade-off of performance benefits and diversification costs. Benefits may take the form of more competent and growth-minded management being more inclined to pursue better environmental and corporate citizenship records as well as good employee relationships. Social responsibility may be indicative of management seeking to improve relations with as many parties critical to their future success as possible. The costs of sacrificing diversification may cut into these benefits because the social screens create portfolios that are unbalanced with

respect to industry weightings, average market capitalization, and book-to-market ratios relatively to their unscreened counterparts.

Looking to solve the issue, Grossman and Sharpe (1986) compared the performance of a South Africa-free NYSE portfolio to the unscreened NYSE portfolio. They found that the screened portfolio generated superior returns. However, the outperformance was entirely attributed to the fact that the screened portfolio disproportionately contained small-cap stocks which outperformed large-caps over the time frame analyzed. Thus, an issue to keep in mind is that under-diversification of SRFs can actually lead to periods of superior performance not attributable to a priced social factor. Rather, there are simply times where small-caps beat large-caps, growth stocks beat value stocks, and socially responsible investment returns appear very competitive. It's important to keep the path of such effects when addressing any study over SRI Funds.

The chart below shows an overall growth in terms of value and return of positively screened investments in 13 European countries. We highlight France and Sweden as lead drivers of innovation in terms of growth of SRI Funds. On a broader analysis, SRI Funds have doubled their resources dedicated at positive screenings in less than two years over Europe, achieving a CAGR of 50%. This evidence translates into increased availability of resources for financing and investing companies with outstanding levels of social responsibility.

Chart 4 - Growth of Best-in-Class Investments by Country
(Source: Eurosif)



As we've covered before, a firm can benefit from a privileged cost of equity by:

- Increasing the relative size of the investor's base (Merton, 1987)
- Lowering its perceived risk

The increasing amount of SRI Funds and their focus provide a great opportunity and mean for companies that excel in CSR, specifically, employee relations, to gain access to better financing conditions in order to explore additional growth opportunities.

3. Research Question and Hypotheses

The purpose of this thesis is to address the link between job satisfaction and performance through a new perspective. A study of employee relations' impact on operational performance, as well as the underlying drivers of value creation in a cross-country cross-time European perspective. Hence, we propose the analysis of performance of companies from 15 different European countries who have consistently ranked as "Best Companies to Work For" within their respective countries, during the period of 2003-2011. By doing so, this thesis aims at the following:

1. Do "Best Companies to Work For" enjoy superior operational performance?
2. Is the superior operational performance robust to cultural frontiers (different countries) and economic environment (different time periods)?
3. How can we explain the implicit creation of operational gains?

In the quest to answer these, we propose a 3-step-approach: First, we begin by studying the operational performance of Best Companies (BC's) compared to a benchmark group, in order to establish the link concerning superior performance and employee relations. In this part, we follow a two-fold analysis: we divide the sample years into two periods (2003-2008, 2009-2011) with the aim of analyzing if employee relations assume a particular weight during bullish or bearish markets. This is done with the goal of verifying the concern of the significance of the impact of the beginning of the financial crisis in 2007/2008 and its relevance in explaining the difference between Best Companies (BC's) and their peers. Additionally, this study seeks to look at cross-country differences to understand the general dynamics behind employee relations and its link

to abnormal performance in the 15 European countries. Secondly, a regression analysis is conducted on determinants of performance of each type of company to gain knowledge on the exact factors that drive the results and which variables explain the differences. Finally, a deeper investigation is carried on key variables individually.

3.1 Hypotheses on Operational Performance and Study Period

As it has been discussed in Section 2, firms that are seen as Best Companies to Work For tend to have better employee attitudes and relations (Fulmer et al., 2003), yielding advantages in attracting, motivating and retaining employees (Ostroff and Bowen, 2000; Chatman, 1989; Montgomery and Ramus, 2007). The expectable outcome of such factors would be to observe that these conditions translate into higher quality products and improved customer service. The outcomes of better employee relations should exert results over defect rates (decrease) and customer service (improvement), leading to the attraction of new customers and decreased churn rates of existing companies (through improved retention). Employee's positive attitudes may be observable by customers and enhance their buying experience in retail settings leading to better retention of customers and a positive impact in customer loyalty (George, 1991; Liao and Chuang, 2004). Furthermore, the differences should be felt in terms of costs - more effective employees should be more efficient and exert a higher level of individual specific investment (Stout, 2002); and capital structure – firms who invest more in employees will tend to be particularly human-capital intensive, which raises research possibilities concerning its impact on capital management efficiency.

On the basis of all the presented theories and empirical findings (see Table 14), this thesis expects that companies that are consistently ranked as “Best Companies to Work For” show increased operational performance.

H1: Profitability of “Best Companies to Work For” is improved compared to their respective peers

As stated before, employee relations can mainly affect performance through the quality of the employees attracted and retained in the firm and the improvement of the level of effort they exert (Ostroff and Bowen, 2000; Fulmer et al., 2003). A particular outcome of this combination relates to the fact that, given these conditions, employees will value their job above the market average and recognize that they have more to lose if they, or the company, perform poorly. Hence, they feel more impelled to work harder to protect their jobs. This premise is particular relevant in the last few years where European countries have experienced a serious crisis affecting all industries. Thus, given the threat of reduced performance due to market conditions, this study wants to complement the research of the role of employee relations in performance by focusing on the particular weight it assumes during bearish market conditions. If employees are more threatened by the potential loss of their job, in a context where there is a cross-country reduction in hiring policies, threatening the continuity of the quality of the job they possess, it would be expected that employees from “Best Companies to Work For” should exert enlarged effort (above market average) to help navigate their company smoothly throughout the crisis. However, on the other hand, HRM policies tend to be sticky in time, restricting companies’ flexibility to adapt to external negative shocks. Moreover, companies that rely more heavily on human capital (lower degree of tangibility), may have increased indirect bankruptcy risks as these assets don’t serve as collateral to calm down shareholders and bond holders’ concerns during troubled times. Hence, there are opposite forces playing in BC’s during a situation of crisis. So, the overall effect over its performance will depend on the balance between the different forces playing. Given the huge number of independent variables involved, we expect no significant change should arrive from the crisis fixed effect over the abnormal operational performance of “Best Companies to Work For” against their peers.

H2: The crisis effect (2008-2011) is not significant to the superior operating performance of “Best Companies to Work For” compared to their respective peer group

3.2 Cross-country differences

One fundamental question in the literature concerning employee satisfaction, although still very limited nowadays, is how performance varies across countries and how do its drivers vary. The vast majority of past literature focuses on the US Market and disregards possible differences and alternative effects in other countries. An investigation of differences between countries will be conducted, although the scope of this study does not cover investigation of the underlying determinants. Europe advocates and defends a single market for European Union Member states, but many structural differences between different European markets remain solid and clearly marked. Nevertheless, although it is expected that employees seek different privileges and value implicit claims differently in their search for job satisfaction, being a “Best Company to Work For” should result in significant abnormal operational performance in all the 15 developed European Markets under study.

H3: “Best Companies to Work For” enjoy superior operational performance across the 15 European countries

3.3 Determinants of Abnormal Performance

There are several channels through which BC’s might obtain improved operational performance.

The benefits over sales and profitability of employee productivity and loyalty have been duly registered and studied (George, 1991; Liao & Chuang, 2004; Simon and DeVaro, 2006). However, many previous studies fail to consider if the impact of this increased turnover is compensated by the additional costs that are incurred to achieve such levels of satisfaction and productivity. Even if good employee relations improve job performance, it may still reduce firm value net of costs. Indeed, many high-performance practices and Human Resource Management Models that aim to delegate responsibility to employees, end up increasing labor costs (Cappelli & Neumark, 1991). Indeed, these unexpected overheads usually come from the costs associated with implementing HRM plans and directives but also from costs with extra-benefits, pensions and health plans, among others that serve many times as corner-stone of employee satisfaction. On the

other hand, these plans exert benefits that are many times disregarded as well. Nevertheless, there are verified benefits from these initiatives. A study conducted by Harvard Business Review December 2010 ⁶analyzed wellness programs at several U.S. large organizations and reported outstanding returns – “a \$2.71 return on every dollar spent on wellness at one organization, a reduction of \$1.421 in medical claim costs for wellness participants at another, and an 80 percent decline in lost work days at yet another.”

The costs and returns of increasing job satisfaction do not fall strictly into the direct expenses category but also exert effects on risk. Firms that rely mainly on its human capital are particularly exposed to market downturns in terms of indirect bankruptcy risks as human capital has little value during a process of insolvency.

I expect “Best Companies to Work For” to present differences in terms of margins, cost structure and employment: to carry higher personnel costs in relation to the number of employees, but benefiting from enough improved sales per employee. Furthermore, I anticipate BC’s to manage more efficiently their general, administrative and marketing costs, reflecting on improved margin (seen as EBITDA/Sales).

- **Margins**

H4: EBITDA/Sales increases in “Best Companies to Work For” compared to their respective peer group and it leads to improved operational performance

- **Cost Structure and Employment**

H5: Personnel Costs per Employee increase in “Best Companies to Work For” compared to their respective peers

H6: Sales per Employee increase in “Best Companies to Work For” compared to their respective peer group and it leads to improved operational performance

⁶ “What’s the Hard Return on Employee Wellness Programs?” by Leonard L. Berry, Ann M. Mirabito, and William B. Baun

In terms of efficiency in capital use, I expect BC's to manage their working capital in a more efficient way, resulting in higher operating abnormal performance. The hypothesis of this paper is also that BC's have a more human-capital intensive structure, presenting lower levels of "tangibility" (measured as *Fixed Assets/Total Assets*)

- **Efficiency in Capital Utilization and Capital Intensity**

H7: Net Working Capital/Sales decreases in "Best Companies to Work For" compared to their respective peer group and it leads to improved operational performance

H8: Fixed Assets/Total Assets decreases in "Best Companies to Work For" compared to their respective peer group

Finally, one implication of resorting to debt is the increased expected bankruptcy costs that it implies. The expected bankruptcy costs can be expressed as a product of the probability of bankruptcy and the costs incurred as a result of bankruptcy. As we have discussed before, "Best Companies to Work For" tend to be human-capital intensive companies or, at least, rely heavily on their human capital to achieve higher performance and results. Given this, these firms will have greater concerns of expected bankruptcy costs as human-capital does not serve as collateral in the case of insolvency. Thus, I expect that "Best Companies to Work For" will be more conservative in their approach to debt ratios and tend to carry less debt than their peers.

- **Capital Structure**

H9: "Best Companies to Work For" have more conservative debt ratios than their respective peer group and it leads to improved operational performance

4. Research Data and Analysis Methods

The following section presents the data utilized by the authors and discusses the choices of methodologies applied. The section starts by justifying the sample group used and the relevance of the event window. It proceeds to the analysis of the determinants of abnormal performance, which are divided into: the relevant performance measures, the chosen techniques to perform a benchmark group matching and the relevant statistical tests and explanatory regressions.

4.1 Sample Group

This section explains the choices on the sample group used, focusing on the decision criteria and study period. The sample used constitutes one of the major contributions of this thesis to past literature, focusing on an unique combination of companies from 15 European countries.

First of all, to obtain the sample used in this paper, this thesis looked at the “Best Companies to Work For” list in Europe, created and co-managed by the Great Place to Work® Institute in collaboration with several international and national entities, in order to identify and measure job satisfaction.

This list was first published in a book in March 1984 (Levering, Moskowitz, & Katz, 1984) and updated in February 1993 (Levering & Moskowitz, 1993). This list has been headed by Levering and Milt Moskowitz throughout its 28-year existence, and is compiled by the Great Place to Work Institute® in San Francisco⁷. In 2002, the European Commission engaged the Great Place to Work® Institute to initiate a government-sponsored Best Companies list competition in some 15 European countries. More than a decade later, the lists currently include the Best Large Workplaces, the Best Small & Medium-Sized Workplaces and the Best Multinationals in Europe. Publication of these lists is part of the Commission’s strategy to support the European economy with successful businesses, desirable workplaces and thriving communities that will bolster European business competitiveness. Nowadays, the European best workplaces research

⁷ While the Institute was not founded until 1990, Levering & Moskowitz used the same criteria for the 1984 list, although they surveyed employees directly rather than through a questionnaire. The interviews used for the 1984 list were the primary basis for the subsequent questionnaire. Indeed, when the Trust Index was first used, it replicated the results that Levering & Moskowitz had obtained when they conducted interviews for their 1984 list.

forms the largest study of organizational culture excellence and people management practices in Europe. Their findings reflect the workplace experience of over 1.5 million European employees, and are part of Great Place to Work global studies in 45 countries around the world. The lists are published in each European country with the support of leading national magazines, institutes and newspapers, as compiled below:

Table 1 - “Best Companies to Work For” Ranking Lists across European Countries

Country	Publishing Entity	Starting year	Last Year
Austria	Collaborator: BMWA; Aon Jauch und Hübener Consulting, karriere.at and bauMax Publisher: Die Presse and “Trend”	2003	2013
Belgium	VLERICK Business School	2003	2013
Denmark	Berlingske Business; Computerworld; Association of the Danish IT Industry (IT-Branchen)	2001	2012
Finland	Talouselämä Magazine	2003	2012
France	Collaborator: Taittinger Publisher: Figaro; Cadremploi; Nespresso; Move your Stress; Ma place en crèche	2002	2013
Germany	Handelsblatt	2003	2011
Greece	Collaborator: ALBA Graduate Business School Publisher: TO VIMA Newspaper	2003	2013
Ireland	The Irish Times	2003	2013
Italy	Il Sole 24 Ora The Work Style Magazine	2002	2012
Netherlands	Collaborator: MT Publisher: Media Partner MT	2003	2013
Norway	Best Place to Work® Norway	2004	2013
Portugal	Publisher: Sábado; TSF Radio; Agência Financeira	2001	2012
Spain	Best Workplace España	2003	2011
Sweden	Great Place to Work® Institute Sweden	2003	2012
UK	The Financial Times The Guardian	2001	2012

A firm’s ranking in the Best Companies list comes from two sources. As explained by the Institute: “Two-thirds of the score comes from employee responses to the Trust Index employee survey. The survey questions were developed through an extensive process that involved reviewing academic literature; interviews with managers, employees, and workplace experts; focus group sessions; and discussions with management consultants, survey design experts, and researchers. Initially, this process created 120 statements, which were narrowed down to 57 following extensive testing with groups of employees,

post-survey interviews, and cluster and factor analysis. The survey has then been beta-tested in a variety of workplace settings to ensure that each survey statement was measured correctly. The final 57 statements span five categories: credibility, respect, fairness, pride, and camaraderie. The first three concern workers' trust in management, the fourth concerns workers' perceptions of the job, and the fifth concerns workers' relationships with other employees". Indeed, the Institute defines a "great place to work" as one where employees trust the people they work for, have pride in what they do, and enjoy the people they work with. Employees provide ratings on a 1-5 scale, and also answer two open-ended questions. To our knowledge, the "Best Companies to Work For" list is the best available measure of employee satisfaction, with recognized credibility by the European Commission.

The process of identifying sample firm starts with filtering the ranking lists of each country (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and United Kingdom) in the period from 2003 - 2009 and retrieving each year the top 15 ranked firms. After obtaining the annual top ranked firms of the 15 countries individually in each of the seven years proposed, the process continues by filtering the companies that managed to obtain this distinction more than two times in this period. The interest falls on the companies that consistently manage to rank as a "Best Company to Work For". This is due to the fact that investment in human capital is a long-term strategy difficult to value as it is an intangible asset. As seen before, managers and investors are many times subject to the effects of myopia theories (Stein, 1988; Edmas 2009) and underinvest in human capital because it is only perceived by outsiders when it manifests in tangible results. In addition, High Performance Work Environments are a long-term corporate commitment that creates path dependency (Collis and Montgomery, 1995). Thus, it may take a long period of time for an intangible asset to produce tangible effects that can be surely recognized as being caused by it. Thus, sporadic investments in human capital may not result in significant difference as both employees and the market will not incorporate them. - "While it [the market] should incorporate tangible information such as performance immediately, it may take time to incorporate intangible information such as job satisfaction, since it is difficult to quantify its impact on firm value" (Edmas, 2011). We focus on the referred study period for three reasons: Firstly to avoid incurring in bias of recent companies whose investment in intangibles as Human Capital has not produced yet tangible results

to be analyzed, given the long-term maturity of the investment. Secondly, the enlarged time-frame of seven years allows to disregard companies that only rank sporadically in the list, raising doubts to the level of commitment of the firms to “employee satisfaction” as a component of the overall business strategy. Finally, the use of more recently nominated companies does not allow for isolation of the effect of recession from general improvement in operational performance as these companies did not benefit from that distinction in the pre-crisis era (before 2008) and thus might be seen as “Best Companies to Work For” for particular reasons associated with the general crisis.

To allow for comparability and avoid any bias of a “Best Company to Work For” award coming from a small number of satisfied employees given the firm’s size, an additional filter of minimum number of employees (above 100) was imposed. By doing this, the paper overcomes the problematic of having excessively small companies without any particular defined HRM practice biasing the results. Further, small companies are exempt from reporting certain key financial items, or from publishing consolidated accounts.

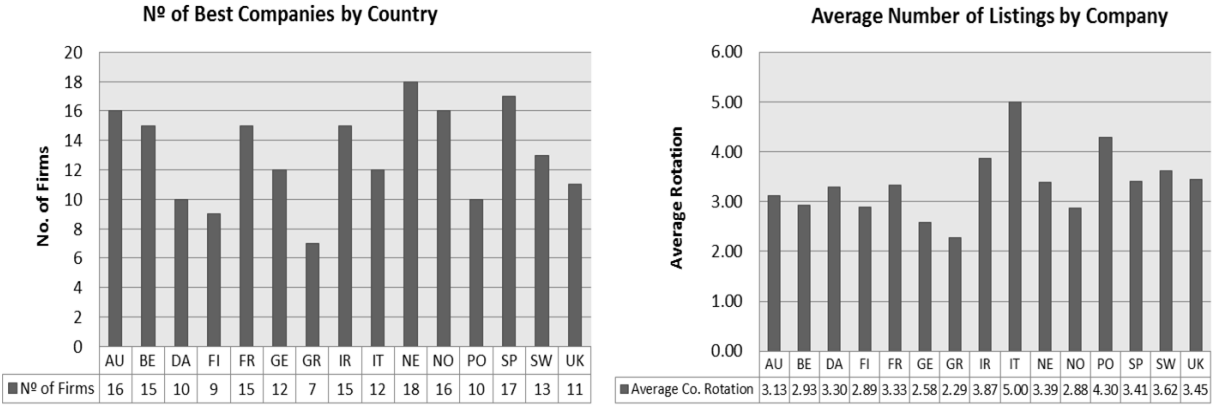
After obtaining the initial sample of portfolio companies, searches were conducted in Amadeus Database (Bureau Van Dijk) to retrieve the available accounting information of our sample companies from 2003-2011. The companies’ website and Thomson Reuters Database were used as well to overcome two main difficulties: On the one hand, the confusion between the operating company and its holding entity. This was particularly relevant in certain countries such as Ireland and Netherlands, primarily known for hosting a great number of European Holdings. On the other hand, it allowed overcoming problems of consolidated and unconsolidated accounts. As far as the first difficulty is concerned, we resorted to Thomson’s SIC codes to avoid confusion with Holding Companies. In the case of missing information due to consolidated/unconsolidated accounting, the companies’ websites were the preferred instrument. In addition, supplementary databases and searches were needed to overcome problems of acquisitions and/or corporate restructuring occurred during the study period. For example, Vitae, a five-time consecutively distinguished “Best Company to Work For” company in the Netherlands, was acquired in 2008 by Manpower Inc. who had been awarded the same distinction in overlapping years.

Furthermore, companies subject to a yearly merger or take-over of a third company not considered a BC were removed. Another major obstacle concerned the case of different subsidiaries held by the same parent company. The most prominent case of such is illustrated by the example of Belgium were two different subsidiaries of the Randstad Holding (Randstad Financial & Professional and Tempo-Team) were distinguished with the same award in overlapping years. These companies were excluded to avoid any biases of doubling their weight in the sample using the same consolidated accounting information. Furthermore, companies that were dissolved or were in the process of being dissolved were excluded as well to avoid biasing negatively the sample.

The chart below describes the final “Best Companies to Work For” sample by country and the average number of listings each company had in each country:

Chart 5 – No. of Sample observations by country and Average Rotation by country
(Source: Authors’ own work)

The chart on the left describes the final number of companies that ranked consistently as “Best Company to Work For” from 2003-2009 by country – it does not account for the peer firms. The chart on the right describes the average number of years each selected company appeared in the top 15 places of the “Best Company to Work For” list from 2003-2009 by country.



The final sample has an average of 13 companies by country, providing a good balance of the European market has a whole. This addresses the gap in literature concerning the applicability of the link between performance and employee relations in Europe as well as possible differences between countries. This is extremely interesting as it allows the study of worldwide recognized concepts in very fragmented markets that are,

nevertheless, integrated by a single market. Furthermore, this link assumes particular relevance as employee mobility among countries continues to be an issue to address, given the differences in languages and some restrictions in terms of tax and pensions transfers between different national systems. Thus, it is expectable that the link between performance and job satisfaction may vary by country, depending on cultural and national factors.

In addition, the preliminary snapshot of the sample portfolio allows verifying that the sample companies managed to rank on average 3.5 times in the TOP 15 “Best Companies to Work For” in the analyzed 7 years. This is extremely relevant as it means that these companies with a medium/big size manage to be not only consistently awarded this distinction in their own countries but also do it by standing in the TOP 15 places of the ranking.

4.2 Detection of Abnormal Performance

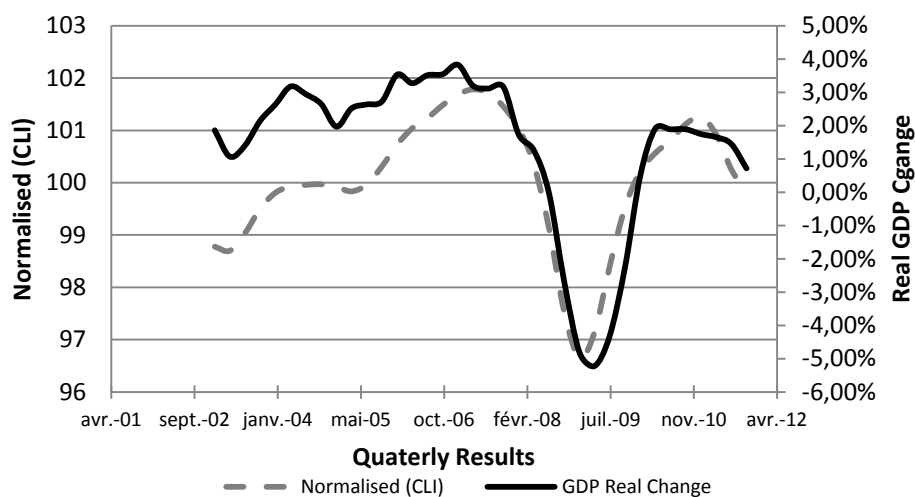
Considerable variation exists in the measures of performance in the existing literature on performance of companies. Barber and Lyon (1996) evaluate methods used in event studies that employ accounting-based measures of performance. They break the problematic into three main components: the choice of an appropriate performance measure, the selection of an appropriate benchmark to implement a precise model of expected operating performance and the selection of the correct statistical test.

The detection of abnormal performance in the presented sample gains particular relevance as it benefits from experiencing two different economical momentums: the pre-crisis period and the crisis period.

All sample countries entered a negative growth period in 2008. GDP weighed decline in aggregate growth rate started already in 2007, and continued until second quarter of 2009. OECD Composite Leading Indicators signal that the slowdown started already in the second half of 2007. Chart 6 shows the aggregate key economic indicators for the sample countries.

Chart 6 - Real GDP change and OECD Composite Leading Indicators 2003-2012
(Source: OECD)

The figure reports seasonally adjusted growth rate of real gross domestic product compared to the same quarter of previous year, and normalized OECD composite leading indicators in the period 2005-2010. Reported values are GDP weighed averages of the country specific values for Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and UK.



4.2.1 Performance Measures

Barber and Lyon (1996) advocate that the use of operating income is a cleaner measure over earnings for two separate reasons: First, it excludes interest expense, special items, income taxes and minority interests. Second, the study period of the research often contains companies that have been subject to corporate events that resulted in changes of the capital structure. Such changes affect interest expense and, consequently, earnings net of interest expense, but leave operating income unaffected (assuming the capital structure changes did not affect the firm's operations).

In order to measure operational efficiency of company's operations, operating income must be scaled. Kaplan (1989) scales operating income with book value of assets, in line with Barber and Lyon (1996) that divide operating income by the average of beginning- and ending-period book value of total assets. Nevertheless, many studies use end-of-period assets leaving the conclusions unaffected.

Another problem concerns the use of operating income absolute levels against percentage change models. The use of percentage changes models raises two fundamental problems. On the one hand, if the measure under study is negative in either

year over which the percentage change is calculated, the result is illogical. This might lead researchers to disregard sample companies that experienced losses during the study period which would bias the results. On the other hand, changes in operating performance are assumed to be proportional throughout the entire study period. The main example of this problematic refers to the case of two firms having the same size in terms of total assets but significantly different levels of operating income. Indeed, a similar absolute change in in the operating income of both firms would affect significantly differently the percentage change of the performance ratios of both firms.

In this thesis, concerning the measurement of profitability, we follow similar literature in other fields (Dennis and Dennis, 1993; DeGeorge and Zeckhauser, 1993; Mikkelson and Partch, 1994; Mikkelson and Shah, 1994) and highlight the *Return on Assets* ratio as the main performance measure (defined as *EBITDA* over *Total Assets*). Using *EBITDA* presents a particular advantage of allowing for comparability with studies in both the same and different areas that address operating performance.

The other performance measures chosen cover two main areas: First, to study the company's *EBITDA margin* (*EBITDA* over *Sales*) in an explanatory way, the ratio is divided into several components of its cost structure focusing on the ones related with employee excellence: *Labour costs ratio* defined as $\text{Labour costs} / \text{Sales}$, *Operating Expenses ratio* defined as $\text{Operating Costs} / \text{Sales}$, *Average Sales per Employee* defined as $\text{Sales} / \text{No. of Employees}$, *Average Personnel Cost per Employee* defined as $\text{Labour costs} / \text{No. of Employees}$. There are limitations in obtaining the company's *Gross Margin* (defined as $\text{Sales} - \text{Cost of Goods Sold} / \text{Sales}$) as the databases available do not provide such specific information on *Cost of Goods Sold* in many European Countries.

Secondly, to measure efficiency in capital utilization (another field related to excellence in Human capital management), we define *Capital Turnover ratio* as $\text{Sales} / \text{Total Assets}$; *Operating Working Capital / Sales* where working capital is defined as $\text{Short-term Debtors} - \text{Short-term Creditors} + \text{Stocks}$; *Tangibility ratio* defined as $\text{Fixed Assets} / \text{Total Assets}$; *Leverage ratio* defined both $\text{Total Debt} / \text{Total Assets}$ and *Long-term Leverage ratio* as $\text{Long-term Debt} / \text{Total Assets}$. The use of the *Operating Working Capital / Sales ratio* also provides information concerning the efficiency of the activity.

In the employment of accounting data, to overcome its limitations, all fiscal years that did not present the ordinary 12 month accounting, were annualized and/or transformed.

4.2.2 Benchmark Group

This thesis focuses on studying if the portfolio of “Best Companies to Work For” benefit from unusually high performance during the study period where they have consistently been ranked as such. Thus, following Barber and Lyon (1996) it is crucial to construct a precise model of expected operating performance as a benchmark stand to identify the performance we would expect in the absence of any extraordinary feature, against which firms can be compared.

Barber and Lyon (1996) construct two main conclusions from the analysis and comparison of nine different models of expected operating performance. First, matching firms according to pre-event or past characteristics yield test statistics generally more powerful. According to them, this can be attributable to the tendency of mean-reversion of accounting-based performance measures. In this note, they make reference as well to the benefit of holding benchmark groups constant over time, if possible and applicable. Secondly, size-adjustments assume particular importance in all test statistics.

The creation of an appropriate benchmark group started with the delineation of the best suited criteria. The first applicable criterion was geography. It was done to assure the safeguard of the cross-country dimension of the analysis. Thus, it is guaranteed that each company is being compared against a peer that benefits from the same market characteristics and competes for the attraction, motivation and retention of a common source of employees. Secondly, the next applicable criterion defined was the industry primary and secondary activity. For industry classification, this study resorted to NACE classification, which benefits from being the original classification code in the great majority of the sample countries. NACE classification is subject of legislation at the European Union level, which imposes the use of the classification uniformly within all member states. In the case of holding companies, when the both the primary and secondary code do not reflect the activities of the company, searches in Thomson Reuters database were conducted to obtain the matching SIC codes of the company's primary and secondary activity and used to match to a peer company.

Finally, after obtaining a matching group for each company individually based on the NACE classification with a geographical national restriction, a peer company is chosen based on a corresponding size as measured by Total Assets in 2010 (the last available peer identification year that can be used in Amadeus). Although it is recognized by the literature, particularly Barber and Lyon (1996), the significant advantage of using pre-event or pre-awards data of performance and/or size to match peer companies, the pursue of data before 2010 limited significantly the availability of data in available databases which would impact severely the size of the sample used and raise several problems in terms of biased results by a small sample. The only alternative to assure a reasonable sized database would be to apply more flexible criteria on the remaining filters (industry and geography) but with equal negative impacts on the final aim of the research.

The matching was obtained, on an initial stage, by searching the range of possible peers (according to industry and geography) for each sample company individually. Afterwards, a filter on size was applied to obtain the ten closest companies that could serve as peers. Finally, manual checking was chosen as the best way to screen each of the ten companies individually to guarantee the fitness of the peer company against the company in the sample portfolio. By checking each company manually it was possible to double-check the robustness of the correspondence of the companies both in terms of the true primary and secondary activities as well as size throughout the study period. In this process, similar problems to the ones related in Section 4.1 were encountered (concerning Holding Companies, dissolved companies, related subsidiaries and impacts of mergers and take-overs) and the same methodology was applied to overcome them.

This thorough procedure allowed disregarding companies that did not present sufficient information in the majority of the years in study. Hence, companies with limited and/or inconsistent data were removed. Finally, our sample and benchmark group were removed for outliers with non-logical values of performance (possibly due to data misspecification). The last step consisted of using two predictive variables for leverage and Normalized Squared Residuals outliers to check for the higher influential and distortive observations⁸.

⁸ See Figure 7 in the appendix

The main limitation of the benchmark group comes from the acceptance of both unconsolidated and consolidated accounts. However, it is not clear the biasing impacts of this on the results. On the one hand, if some of the overhead costs are borne by parent companies, the profitability could be upward biased for the subsidiaries. On the other hand, bankrupted or dissolved companies were discarded as benchmark companies, having possible implications in terms of upward biased results as well. Nevertheless, these biases do not constitute a threat if the results of abnormal performance stand even in the adverse environment of upward biased models of expected performance. It constitutes a further motivation to the study to check the robustness of the results against the most solid benchmark possible.

Table 2 describes the entire sampling and benchmarking process.

Table 2 – Sampling Process, Benchmark techniques and *Outlierness*

This table presents a step-by-step description of the methods and databases used to obtain the final sample and benchmark group. A final number of 125 companies refer solely to the sample portfolio companies. In total, 250 companies were used in the analysis. The description of the steps are as follows: Size/Frequency Screening consists of filtering the list of companies with more than 100 employees that classified in the top 15 places more than twice; Database Screening consists on checking for the availability of information in the databases; Manual Checks describes the manual procedures through other databases and company's websites to overcome the problems of holdings, different subsidiaries, merges and take-overs and others; Suitable Peers refers to the existence of peers according to the defined criteria; Peer information relates to the availability of information on peers on the databases; Matching years relates to the screening for existing observations on the same year.

	Great Place to Work® Institute	Bureau Van Dijk – Amadeus Database	Sample Total (x2)
Initial Sample	225	-	-
Size/Frequency Screening	196	-	-
Database Screening	-	170	-
Manual Checks	-	168	-
Suitable Peers	-	150	300
Peers Information	-	143	286
Manual Check	-	140	280
Matching years	-	127	254
<i>Outlierness</i>	-	126	252
Leverage	-	125	250
Final		125	250

4.2.3 Statistical Tests and Regressions

4.2.3.1 Statistical Parametric and Non-Parametric Tests

Statistical tests for difference are made on the benchmark-adjusted abnormal performance, where abnormal performance $AP_{i,t}$ is defined as realized performance less expected performance $E(P_{i,t})$, which is obtained from the benchmark group:

$$AP_{i,t} = P_{i,t} - E(P_{i,t}) \quad (1)$$

Where AP is the profitability measure used defined as EBITDA / Assets.

The statistical significance for the abnormal operational performance is ascertained through a Wilcoxon rank-sum (Mann-Whitney) non-parametric test (that can be roughly interpreted as a difference in medians test) and a Classical Parametric Tests (difference of means). Using the notation just defined, this means testing if there is a difference in means between “Best Companies to Work For” and the Control Firms.

$$\begin{array}{l|l} H0: \text{Mean BC} - \text{Control} (AP_{i,t}) = 0 & H0: \text{Median BC} - \text{Control} (AP_{i,t}) = 0 \\ H1: \text{Mean BC} - \text{Control} (AP_{i,t}) \neq 0 & H1: \text{Median BC} - \text{Control} (AP_{i,t}) \neq 0 \end{array}$$

A similar approach is used to compare relevant measures of profitability, capital structure, efficiency in capital use and activity ratios between the Best Companies and the Control Group.

4.2.3.2 Regression Models

The first and second hypothesis are tested as well similarly to Ehrlich et al. (1994), by searching for differences in abnormal performance between the sample group and the benchmark group along with comparison of differences in time trends efficiency in two separate period. This is done by estimating the following fixed-effect models⁹:

$$\text{Model 1: } PERF_{it} = \alpha_i + \beta_{1i} * \text{BestComp} + \beta_{2i} * \text{After} + \beta_{3i} * \text{BestCompAfter} + \gamma_{4i} * \text{Size}_{it} + \varepsilon_i, \quad (2)$$

Where $E(\varepsilon_i \varepsilon'_j) = \sigma_{ij}$.

⁹ Ehrlich et al. use a similar model to test the effect of public versus private ownership (though not of privatization) on a panel of 23 international airlines over a 10-year period.

The coefficient on the interaction term (β_3) gives us the Difference-in-Differences (DD) estimate of the treatment effect (the DD estimator). In addition, β_1 is the average value of interested variable of treatment firms in the pre-treatment period relative to the average value of the variable of control groups in the pre-treatment period while β_2 is the average value of interested variable of control firms in the post-treatment period relative to their average value in the pre-treatment period.

Hence, the effect of being a Best Company in this model can be seen from the coefficients of *BestComp* and *BestCompAfter*. A positive coefficient of *BestCompAfter* would indicate that performance increases more over time in the situation of a crisis (or decreases less if the *After* coefficient is negative). In addition, the study of the drivers of performance in “Best Companies to Work For” is done through a regression that incorporates coefficients related with the firm’s cost structure, efficiency in capital utilization, cost structure and activity efficiency. The possible existence of different structures between the companies requires the creation of two sub-samples (Best Companies and their Peers) on which to run the multivariate regressions individually. Otherwise, the study would be subject to values with no-economic logic and significance (e.g. if Best Companies have higher ROA and pay higher wages per employee, an analysis of the entire sample may suggest a positive relation between profitability and wages, expressing that raising wages increases profitability).

$$\text{Model 2: } PERF_{i,t} = \alpha_i + \sum \beta_{j,i} * \text{Cost Structure} + \sum \beta_{j,i} * \text{Capital Efficiency} + \sum \beta_{j,i} * \text{Capital Structure} + \gamma_{j,i} * \text{Size}_{it} + \sum \gamma_{j,i} * \text{Country Dummy} + \varepsilon_i \quad (3)$$

The cost structure is analyzed by studying the ratios of Labour Costs / Sales and Other Operating Expenses / Sales. As far as the capital efficiency is concerned, the ratio of Operating Working Capital / Sales will be used. Finally, capital structure is asserted through leverage ratios (Debt / Assets) and the degree of “tangibility” of the assets (Fixed Assets / Total Assets). Employment indicators such as Sales per Employee and Labour Costs per Employee will be analysed with individual regressions. All of the above are controlled for size, here defined as Log(Assets) and country dummies

5. Results and Discussion

This chapter presents the results regarding the main hypotheses. It starts by presenting the summary statistics of the sample and follows to the presentation of the main findings regarding the superior operational performance of “Best Companies to Work For” and the impacts produced by the crisis. Finally, we investigate the sources of value gain and performance in each type of company that will serve as basis to a final comparison of different variables between the sample portfolio firms and the control group.

5.1 Summary Statistics

In total, there are 250 companies from 15 different European Countries. There are the same number of observations in the calculation of profitability in both the sample group and the benchmark group.

It is visible below that Best Companies appear to have higher profitability ratios along with higher margins (measured by EBITDA / Sales). Furthermore, summary statistics appear to indicate several differences in the Cost Structure of both types of companies, mainly concerning the weight of different kinds of costs in the overall sales. In addition, the statistics predict differences in the capital structure of the two sample groups. These statistics provide a strong basis of analysis as, preliminarily, the two samples appear to rely on different structures in terms of costs, capital and asset utilization. The variables vary significantly when analysed by time period¹⁰ and by country¹¹.

¹⁰ See table 15 in the appendix

¹¹ See table 16 in the appendix

Table 3 - Summary Statistics for Mean, Median, Std. Deviation and first and third quartile (by Type of Company)

The table reports Summary Statistics of the years there is sufficient information to compare a company with its peer firm. ROA, Sales/Assets, EBITDA/Sales, Labour/Sales, Other Costs/Sales, Fixed Assets/Total Assets, Leverage Ratios and Operating Working Capital/Sales are presented in percentage points. Labour Costs per Employee and Sales per Employee are presented in thousands of euros. Size is computed as the Log of Total Assets. Best Companies are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. All the measures are computed using the observations from the entire time period (2003-2011).

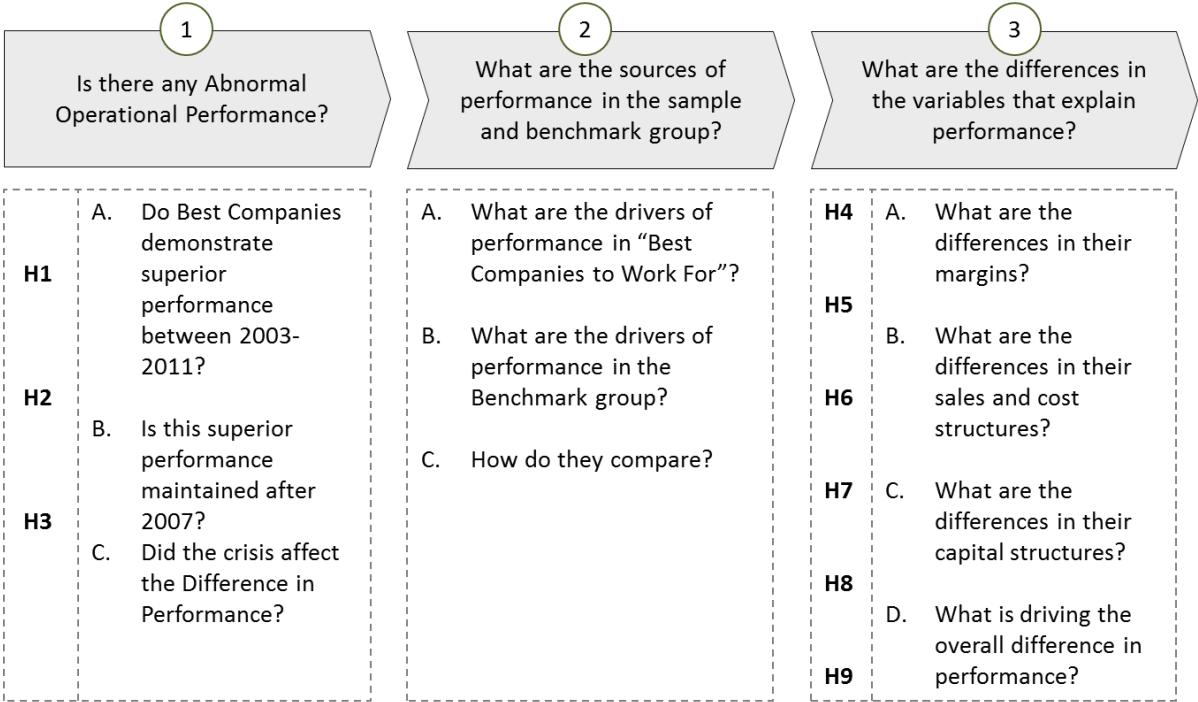
Variables	Best Companies to Work For					Control Companies				
	Mean	Std. Dev.	Q1	Median	Q3	Mean	Std. Dev.	Q1	Median	Q3
A. Profitability										
ROA	17.41%	12.24%	8.64%	15.74%	25.16%	10.84%	10.76%	4.91%	9.04%	15.56%
Sales / Assets	185.89%	136.00%	109.21%	176.77%	234.14%	171.88%	129.72%	88.82%	138.72%	212.86%
EBITA / Sales	12.64%	10.93%	5.58%	9.70%	16.50%	9.28%	11.53%	2.70%	6.64%	12.74%
B. Cost Structure										
Labour / Sales	31.31%	20.53%	14.48%	26.06%	44.79%	25.91%	19.05%	13.11%	20.54%	34.20%
Other Costs / Sales	64.28%	25.16%	46.18%	71.04%	82.89%	70.18%	24.69%	56.85%	75.38%	87.54%
C. Employment										
Labour Costs per Employee	78.09	45.06	47.48	68.15	101.64	61.82	30.87	42.17	56.75	74.35
Sales per Employee	375.08	425.04	206.04	274.63	445.07	353.12	375.60	162.57	252.51	408.16
D. Capital Structure and Efficiency										
Fixed Assets / Total Assets	30.22%	26.44%	7.91%	21.35%	45.37%	35.08%	26.87%	11.14%	31.03%	54.72%
Operating Working Capital / Sales	15.58%	18.14%	2.83%	12.39%	25.89%	17.50%	16.42%	6.68%	16.09%	25.10%
Debt / Total Assets	61.56%	25.87%	45.61%	63.35%	80.13%	63.93%	25.20%	48.05%	65.76%	79.95%
LT Debt / Total Assets	12.12%	16.33%	0.83%	5.27%	15.89%	15.69%	19.10%	1.38%	9.11%	23.64%
Size	2.23	0.33	2.00	2.17	2.45	2.18	0.32	1.98	2.13	2.37

5.2 Main Findings

This section will follow a step-by-step line of reasoning to understand how and why performance differs between companies with high levels of employee satisfaction and their peers. The section is organized as following:

Figure 4 – Resume of Empirical Approach

The figure presents the line of reasoning followed to test the purposed hypotheses. The letters H1, H2, H3, H4, H5, H6, H7, H8 and H9 refer to the 9 hypotheses purposed for testing and are placed according to the section that will address them. The second section will cover the essential basis of analysis required to investigate the final hypotheses in the last section.



5.2.1 Abnormal Operating Performance in “Best Companies to Work For”

5.2.1.2 Overall Abnormal Operational Performance

Large positive gains in return to invested capital reported in previous studies (See e.g. Guo et al., 2011) suggest that one of the main drivers of value creation is true economic value creation at the operational level.

This research found that “Best Companies to Work For” earn superior returns in terms of ROA of 6.56% on the presented time period with significance at 99% confidence level. The first hypothesis is corroborated that companies with high employee satisfaction present abnormal operational returns.

The results resist when using parametric, non-parametric tests, univariate and multivariate¹² regressions. Furthermore, in terms of *Capital Turnover ratio*, here measured as Sales / Assets, companies with outstanding relations with employees present up to +14% higher operational gains with a significance level of 1% to 10% depending on the type of test used. This difference roots partially from differences in margins where BC's enjoy higher operational margins of 3 percentual points against their peers. Indeed, these results validate the presented literature that when employees recognize they are being rewarded satisfactorily, there is a motivation to increase their own firm-specific investment (in terms of effort) in accordance with the overall objective of the firm. Either through increased productivity or superior quality of attracted and retained employees, these firms seem to be better managing their productive, general and administrative structure.

**Table 4 - Abnormal Operational Performance in “Best Companies to Work For”:
T-test, Wilcoxon rank-sum test (Mann-Whitney) test and univariate regression**

This table presents the differences in profitability between “Best Companies to Work For” and their peers. BC's are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests, Wilcoxon ranksum (Mann-Whitney) tests and univariate regression.

Variables	BC's		Control		t-statistics (t - tests)	z-statistics (Wilcoxon tests)
	Mean	Median	Mean	Median		
ROA	17.41%	15.74%	10.84%	9.04%	6.57% ***	6.70% ***
Sales / Assets	186.0%	176.8%	171.9%	138.7%	14.01% *	38.05% ***
EBITA / Sales	12.64%	9.70%	9.28%	6.60%	3.36% ***	3.06% ***

5.2.1.2 Controls and Multivariate Regressions

To check the robustness of the tests and to address the hypotheses that have not been covered so far, several multivariate regressions have to be performed using control

¹² See Figure 5 in the appendix

variables. The control variables considered in this part are those considered to be most relevant by the literature. In this case, it is considered Size as log of total assets (logarithmized to correct for normality), the fixed effect of the crisis and country dummies. The regression does not include control variables related with a firm's cost and capital structure once, as seen in Section 5.1, these companies have significantly different structures. This would lead to results bias, translated in the existence of coefficients without economic logic (e.g. if BC's have higher ROA's while paying significant higher wages, a regression would show that high wages are a positive driver of performance). Nevertheless, the control variables will be applied ahead in the sub-samples.

We regressed ROA on our main explanatory variable (Best Company to Work For), and on the control variables:

$$ROA = \alpha_i + \beta_{1i} * BestComp + \beta_{2,i} * Size + \beta_{3i} * AfterCrisis + \sum \beta_{j,i} * (country\ dummy) + \varepsilon_i$$

(4)

When controlled by these variables, Best Companies continue to present an abnormal operational performance of 6.96% on their ROA (with a *p-value* of 0.000¹³). The results stand over a total of 1606 observations yielding an R-squared of 0.1816.

The results do not stand however across all countries in the sample group¹⁴. Being consistently ranked in the competition list translates into higher performance in Belgium, France, Germany, Greece, Italy, Netherlands, Norway, Portugal and Spain (with significance at a 90% to 99% confidence level, depending on the country). Without taking into account Ireland and Netherlands given their reduced sample size and the complex barriers raised by the predominance of holding companies, countries with higher general standards of living and working conditions are particularly resistant to the effects of being part of this ranking: Austria, Denmark, Finland and Sweden. Although this thesis will not study the underlying determinants of cross-country

¹³ See Figure 5 in the appendix

¹⁴ See Table 17 in the appendix

differences, there seems to be evidence that national factors influence the importance of companies having a high reputational level of job satisfaction.

5.2.1.3 The Crisis Effect

There is a strong interest in understanding the role the financial crisis played. Both workers and managers are affected by the exterior environment in their choices and will value differently their options in a period of financial constraints and reduced growth. We found that the abnormal operational performance is independent of the time period chosen, being that BC’s ROA is superior to their peers by 6.97% and 5.9% at the 1% significance level, in the years before the crisis and after the crisis, respectively.

Indeed, even in a situation of reduced growth “Best Companies to Work For” continue to gain abnormal operational returns over other firms. However, as it can be seen from Tables 5 and 6, the significance of the results does not apply to the Capital Turnover ratio, when we use parametric tests. Although this may be caused by non-normality in the distribution, it is interesting to observe how BC’s maintain higher margins at a 99% confidence level but not necessarily higher *Capital Turnover* ratios. Thus, the difference may be explained by a better efficiency in managing costs and capital and not necessarily due to higher sales or productivity in the same period. All mentioned options will be more deeply analysed ahead.

Table 5 - Abnormal Operational Performance in “Best Companies to Work For” Before the Crisis: T-test and Wilcoxon ranksum (Mann-Whitney) test

This table presents the differences in profitability between “Best Companies to Work For” and their peers before the crisis. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests (difference of means) and Wilcoxon ranksum Mann-Whitney tests (difference of medians). Only observations from 2003-2007 are included.

Variables	BC's		Control		t-statistics (t - tests)	z-statistics (Wilcoxon tests)
	Mean	Median	Mean	Median		
ROA	18.40%	17.43%	11.42%	9.63%	6.97% ***	7.80% ***
Sales / Assets	190.2%	175.2%	176.8%	138.7%	13.38%	36.44% ***
EBITA / Sales	13.31%	10.47%	9.56%	7.36%	3.76% ***	3.12% ***

Table 6 – Abnormal Operational Performance in “Best Companies to Work For” After the Crisis: T-test and Wilcoxon ranksum (Mann-Whitney) test

This table presents the differences in profitability between “Best Companies to Work For” and their peers before the crisis. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests (difference of means) and Wilcoxon ranksum Mann-Whitney tests (difference of medians). Only observations from 2008-2011 are included.

Variables	BC's		Control		t-statistics (t - tests)	z-statistics (Wilcoxon tests)
	Mean	Median	Mean	Median		
ROA	15.79%	14.13%	9.89%	8.16%	5.90% ***	5.97% ***
Sales / Assets	178.5%	177.5%	163.4%	138.3%	15.12%	39.2% **
EBITA / Sales	11.51%	8.67%	8.82%	5.60%	2.68% ***	3.07% ***

Finally, stating that that the Best Companies maintained their over-performance does not mean that these companies preserved their levels of performance throughout the financial crisis, but merely that they kept their excess performance levels constant to their peers. By looking deeper into the results¹⁵ of our sample portfolio, we can observe that both the sample portfolio firms and the control group companies suffered the effects of the crisis, seeing their ROA reduced by 3% and 1.8% in the case of Best Companies and Control firms, respectively. These results were significant at a 99% and 90% confidence level.

5.2.1.4 The Difference-In-Difference

The next fundamental step is to understand if the crisis effect played a significant role in the abnormal operational performance of our sample portfolio. For that, an interactive dummy variable is used to identify the fixed effect in question. Nevertheless, this paper did not obtain any significant result for that effect. The result can be expected as there are a multitude of forces counter-balancing performance in Best Companies during a crisis situation. On the one hand, it would be expectable that these companies suffer from a lack of flexibility to adapt to times of reduced growth as they are committed to

¹⁵ See Table 18 and Table 19 in the appendix

Human Resources practices that are “sticky” in time. Hence, they are not able to tailor its workforce to the fall of consumption levels. On the other hand, during a troubled economical period, employees will tend to value their work more, motivating them to exert extra-effort to maintain it. This is particularly true for employees that work in environments with high levels of satisfaction. The workforce of “Best Companies to Work For” should demonstrate the highest levels of motivation to do everything in their reach to help the company sail through troubled times in order to keep their jobs.

We find that the crisis did not play any significant effect on the difference between companies with high employee satisfaction and their peers, with a *p-value* of 0.361.

Table 7 - Difference-In-Difference of the Financial Crisis on “Best Companies to Work For” Abnormal Operational Performance

This table reports the difference-in-differences estimates on Return on Assets (ROA). ROA is defined as the ratio of EBITDA/Total Assets. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. Before Crisis refers to all the observations referent to the period from 2003-2007. After Crisis refers to all the observations referent to the period 2007-2011. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

	Before Crisis (2003-2007)	Crisis (2008-2011)	Difference [Crisis - Before]
Best Companies	18.40%	15.79%	-2.61% *** (-2.98)
Control Firms	11.42%	9.89%	-1.53% ** (-1.95)
Difference [Best Company - Control Firm]	6.97% *** (9.57)	5.9% *** (6.40)	-1.07% (-0.91)

It can be hypothesized that the mentioned forces are compensating each other and result in no significant fixed effect of the crisis in our sample group. The thematic will be discussed in the next chapter.

5.2.2 Sources of Operational Performance and Value Gain

It is not sufficient to prove the superior operational performance of Best Companies without understanding the drivers of value gain in order to obtain insights on the specific role employee satisfaction is playing. As the two kinds of companies rely on different capital structures and managing schemes, we will focus on each separately to understand what the main drivers of operational performance in each are so that later we can compare the two structures and understand where specifically the positive difference in operational performance is being generated.

After dividing the sample and the benchmark group, regressions were conducted on both using several control and explanatory variables progressively.

5.2.2.1 Sources of Operational Performance on “Best Companies to Work For”

The first focus of the study will be “Best Companies to Work For” and their value-creation process. With this purpose, multivariate regressions have been used distinguished by two key differences: the first set of regressions used as proxy to the firm leverage and capital structure the ratio of Total Debt/Total Assets. The second set of regressions, focusing on the long-term nature of investment in human capital and to avoid the problem of including non-financial current debt, used the ratio Long-term Debt/Total Assets as proxy for leverage.

This thesis found the key drivers of operational performance are the ones related with Labour Costs/Sales, Operating Expenses/Sales and Operating Working Capital/Sales. These variables are significant at 1% confidence levels independently of the dependent and control variables used. As far as Best Companies are concerned, the drivers of performance are independent of the leverage ratio used.

Hence, Best Companies’ operational performance does not rely on any extraordinary driver of performance either than productivity in terms of sales, cost managing skills and efficiency in capital utilisation. The level of leverage is not a significant driver of performance which can mean that the disciplinary role of debt and its benefits are achieved through other mechanisms such a job satisfaction. The degree of tangibility (Fixed Assets / Total Assets) does not assume a particular role as well.

Table 8 - Multivariate Regression for “Best Companies to Work For” (with Debt / Assets)

This table reports the coefficient estimates of OLS regressions. The dependent variable is the ROA during the period in analysis (2003-2011). ROA is defined as EBITDA/Assets. Only companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009 are considered in the sample. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. Leverage is the ratio of total debt to total assets. Operating Working Capital/Sales is defined as Short-term Debtors minus Short-term Creditors plus Stocks. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

	Return On Assets (1)	Return On Assets (2)	Return On Assets (3)	Return On Assets (4)	Return On Assets (5)
Log (Assets)	-0.0343855 *** (-5.34)	-0.033891 *** (-4.73)	-0.0093716 (-1.28)	-0.0101438 (-1.40)	-0.0269714 *** (-2.91)
A. Cost Structure					
Labour / Sales	-0.2296759 *** (-5.79)	-0.2293897 *** (-5.86)	-0.1627155 *** (-4.48)	-0.1682661 *** (-4.60)	-0.1905764 *** (-5.11)
Other Costs / Sales	-0.2122867 *** (-5.40)	-0.2126573 *** (-5.31)	-0.1344296 *** (-3.57)	-0.1461484 *** (-3.78)	-0.1873049 *** (-4.72)
B. Capital Structure and Efficiency					
Fixed Assets / Total Assets		-0.0036121 (-0.16)	-0.0342106 (-1.54)	-0.0418116 * (-1.85)	-0.0184948 (-0.73)
Operating Working Capital/Sales			-0.2437055 *** (-7.17)	-0.2260695 *** (-6.72)	-0.2267118 *** (-6.23)
Debt / Total Assets				-0.0213431 (-1.22)	-0.0133432 (-0.79)
Country Dummies	No	No	No	No	Yes
Observations	572	572	547	541	541
R-squared	0.1001	0.1002	0.2019	0.2032	0.2647

Table 9 – Multivariate Regression for “Best Companies to Work For” (with Long-Term Debt/Assets)

This table reports the coefficient estimates of OLS regressions. The dependent variable is the ROA during the period in analysis (2003-2011). ROA is defined as EBITDA/Assets. Only companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009 are considered in the sample. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. Leverage is the ratio of Long-term Debt to total assets. Operating Working Capital/Sales is defined as Short-term Debtors minus Short-term Creditors plus Stocks. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

	Return On Assets (1)	Return On Assets (2)	Return On Assets (3)	Return On Assets (4)	Return On Assets (5)
Log (Assets)	-0.0343855 *** (-5.34)	-0.033891 *** (-4.73)	-0.0093716 (-1.28)	-0.0071582 (-0.99)	-0.0238108 *** (-2.73)
A. Cost Structure					
Labour / Sales	-0.2296759 *** (-5.79)	-0.2293897 *** (-5.86)	-0.1627155 *** (-4.48)	-0.1681341 *** (-4.69)	-0.1931541 *** (-5.10)
Other Costs / Sales	-0.2122867 *** (-5.40)	-0.2126573 *** (-5.31)	-0.1344296 *** (-3.57)	-0.1531791 *** (-4.54)	-0.205705 *** (-5.64)
B. Capital Structure and Efficiency					
Fixed Assets / Total Assets		-0.0036121 (-0.16)	-0.0342106 (-1.54)	-0.0432208 ** (-1.98)	-0.0152766 (-0.63)
Operating Working Capital/Sales			-0.2437055 *** (-7.17)	-0.2373995 *** (-7.01)	-0.2350985 *** (-6.51)
LT Debt / Total Assets				-0.0081426 (-0.26)	-0.0470384 (-1.38)
Country Dummies	No	No	No	No	Yes
Observations	572	572	547	540	540
R-squared	0.1001	0.1002	0.2019	0.2095	0.2841

5.2.2.1 Sources of Operational Performance on Control Firms

In the case of the Control Firms, the multivariate regressions carried on the benchmark group show differences depending on the leverage ratio used.

On the first set of tests, Control Firm's performance is driven by the same variables than Best Companies with the addition of the "Tangibility" proxy ratio. Indeed, the ratio Fixed Assets/Total Assets is significant at 99% confidence level throughout all regressions with a coefficient varying between 0.04 and 0.06 and an average *t-statistics* coefficient of 3.57. It appears that these companies, whose ratio in analysis is higher when compared to our sample portfolio, have potential gains and losses to obtain from variations of this ratio. Thus, it seems that they might be relying on an excessive level of capital-intensity without visible benefits in terms of capital productivity.

In this case, the use of different leverage ratios pays off in terms of a more accurate analysis. When we focus on leverage as a Long-term Debt, our evidence proves that companies that do not excel at providing recognized employee satisfaction to their employees are dependent on their leverage ratios as a driver of performance. These results are robust at 1% and 5% significance levels.

These firms do not seem to include their employees as a key area of their overall future business strategy (or at least not to succeed in doing so from the employees' perspective). The results prove to be that they have to dispend higher attention on their long-term debt ratio to meet their objectives. In the absence of employee satisfaction and commitment to the firm, debt appears to assume a superior influential role in the performance of the company, confirming the hypothesis of free cash flow theory (Jensen, 1986).

These results tend to indicate that the two kinds of companies utilize different mechanisms to achieve their goals related with efficiency, lower costs and higher sales. A firm that does not present high levels of employee satisfaction is more highly dependent on alternative mechanisms such as debt and capital-intensity. At the same time, the two different approaches are generating different absolute levels of performance.

Table 10 – Multivariate Regression for Control Firms (with Debt/Assets)

This table reports the coefficient estimates of OLS regressions. The dependent variable is the ROA during the period in analysis (2003-2011). ROA is defined as EBITDA/Assets. Only the peer companies from the control group are included in this regression. Peer companies are matched by geography, industry and size. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. Leverage is the ratio of total debt to total assets. Operating Working Capital/Sales is defined as Short-term Debtors minus Short-term Creditors plus Stocks. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

	Return On Assets (1)	Return On Assets (2)	Return On Assets (3)	Return On Assets (4)	Return On Assets (5)
Log (Assets)	-0.0264556 *** (-4.85)	-0.0361671 *** (-6.25)	-0.0336891 *** (-6.06)	-0.0342551 *** (-6.11)	-0.0242431 *** (-3.61)
A. Cost Structure					
Labour / Sales	-0.1631028 *** (-3.89)	-0.1759428 *** (-4.24)	-0.1805056 *** (-4.06)	-0.1811924 *** (-5.28)	-0.1436457 *** (-3.46)
Other Costs / Sales	-0.2048655 *** (-5.70)	-0.2146452 *** (-6.03)	-0.2169658 *** (-5.50)	-0.2108164 *** (-5.50)	-0.2187228 *** (-5.66)
B. Capital Structure and Efficiency					
Fixed Assets / Total Assets		0.0609373 *** (4.04)	0.0614064 *** (3.79)	0.0623116 *** (3.86)	0.0407462 *** (2.60)
Operating Working Capital/Sales			-0.0646432 *** (-2.36)	-0.0614345 ** (-2.28)	-0.064339 ** (-2.20)
Debt / Total Assets				-0.0141894 (-0.88)	0.0055373 (0.33)
Country Dummies	No	No	No	No	Yes
Observations	616	616	585	583	583
R-squared	0.1782	0.1986	0.1973	0.1966	0.285

Table 11 – Multivariate Regression for Control Firms (with Long-Term Debt/Assets)

This table reports the coefficient estimates of OLS regressions. The dependent variable is the ROA during the period in analysis (2003-2011). ROA is defined as EBITDA/Assets. Only the peer companies from the control group are included in this regression. Peer companies are matched by geography, industry and size. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. Leverage is the ratio of long-term debt to total assets. Operating Working Capital/Sales is defined as Short-term Debtors minus Short-term Creditors plus Stocks. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

	Return On Assets (1)	Return On Assets (2)	Return On Assets (3)	Return On Assets (4)	Return On Assets (5)
Log (Assets)	-0.0264556 *** (-4.85)	-0.0361671 *** (-6.25)	-0.0336891 *** (-6.06)	-0.1886636 *** (-5.80)	-0.023681 *** (-3.53)
A. Cost Structure					
Labour / Sales	-0.1631028 *** (-3.89)	-0.1759428 *** (-4.24)	-0.1805056 *** (-4.06)	-0.1886636 *** (-4.21)	-0.1543322 *** (-3.78)
Other Costs / Sales	-0.2048655 *** (-5.70)	-0.2146452 *** (-6.03)	-0.2169658 *** (-5.50)	-0.2240964 *** (-5.63)	-0.2336728 *** (-6.38)
B. Capital Structure and Efficiency					
Fixed Assets / Total Assets		0.0609373 *** (4.04)	0.0614064 *** (3.79)	0.0758048 *** (4.36)	0.054596 *** (3.20)
Operating Working Capital/Sales			-0.0646432 *** (-2.36)	-0.0515103 * (-1.89)	-0.0487908 * (-1.72)
LT Debt / Total Assets				-0.0600357 ** (-2.43)	-0.0676683 *** (-2.85)
Country Dummies	No	No	No	No	Yes
Observations	616	616	858	580	580
R-squared	0.1782	0.1986	0.1973	0.2102	0.3134

5.2.3 Comparing Sources of Operational Performance

We have unveiled in the previous section that the main drivers of performance are:

- Labour / Sales and Operating Costs / Sales
- Operating Working Capital / Sales
- Fixed Assets / Total Assets – in the case of control firms
- Long-term Debt / Total Assets – in the case of control firms

Employee Relations and Job Satisfaction are, hence, impacting the overall operational performance of the companies in analysis through specific effects on these variables. To understand the complete root of the effects and the specific differences between the sample and the benchmark group in terms of costs, sales, capital structure and efficiency in managing assets, a comparative analysis is required.

The table below allows decomposing the difference in performance in different variables. The first important result is the fact that BC's are profiting from higher EBITDA Margins (with a significant difference at 1% level of about +3.35%). Next, taking into account the components of this margin, Best Companies have significant higher ratios of Labour Costs / Sales and smaller ratios of Other Operating Costs / Sales. This seems to indicate that although these companies are incurring in higher costs with wages, these are being compensated with lower operating expenses that ultimately result in a positive impact on the EBITDA Margin.

An analysis on the variables of Sales per employee and Labour Costs per employee allows verifying if the differences are produced by higher sales or lower wages. Indeed, Best Companies incur in superior personnel costs by employee (significant results at a 1% level) without benefiting from higher sales per employee. These results are robust to regressions with control variables¹⁶. Hence, job satisfaction is requiring higher costs with labour without necessarily reflecting into higher productivity of the employees in terms of sales. So, the channel through which they are obtaining higher operational performance is not through an increase in sales but rather through a decrease in costs.

¹⁶ See Table 20 and Table 21 in the appendix

Table 12 – Differences between Best Companies and Control Firms

This table reports structural differences between “Best Companies to Work For” and their peers. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the last column for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests, Wilcoxon ranksum (Mann-Whitney) tests and univariate regression.

Variables	BC's		Control		t-statistics (t - tests)	z-statistics (Wilcoxon tests)
	Mean	Median	Mean	Median		
A. Profitability						
EBITA / Sales	12.64%	9.70%	9.28%	6.64%	3.35897% ***	3.06043% ***
B. Cost Structure						
Labour / Sales	31.31%	26.06%	25.91%	20.54%	5.40243% ***	5.51457% ***
Other Costs / Sales	64.28%	71.04%	70.18%	75.38%	-5.89498% ***	-4.34171% ***
C. Employment						
Labour Costs per Employee	78.09	68.15	61.82	56.75	16.27252 ***	11.40148 ***
Sales per Employee	375.08	274.63	353.12	252.51	21.96533	22.1235 **
D. Capital Structure and Efficiency						
Fixed Assets / Total Assets	30.22%	21.35%	35.08%	31.03%	-4.86603% ***	-9.68619% ***
Operating Working Capital / Sales	15.58%	12.39%	17.50%	16.09%	-1.92427% **	-3.70151% ***
Debt / Total Assets	61.56%	63.35%	63.93%	65.76%	-2.37661% *	-2.40465% **
LT Debt / Total Assets	12.12%	5.27%	15.69%	9.11%	-3.56834% ***	-3.83994% ***
Size	2.23	2.17	2.18	2.13	0.1123302 **	0.0323 ***

As far as the capital structure and its efficiency is concerned, Best Companies manage better their operating capitals, maintaining a ratio of Operating Working Capital / Sales about 3.7% lower (with a significance level of 1%). In terms of capital structure, these companies present leverage ratios about 2.4% and 3.8% lower, when measuring for Total Debt and Long-Term Debt, respectively. These results, allied with the drivers of performance obtained in the previous section, indicate that when companies carry more debt, it assumes an explanatory role on performance. However, Best Companies prove the existence of complementary mechanisms of disciplinary efficiency, by reducing debt's influential and gaining financial slack to reduce their leverage ratios without sacrificing their performance.

Interestingly, capital-intensity assumes a similar behaviour to debt levels. It is relevant as a driver of performance in the companies that present higher ratios – control firms have FA/TA ratios up to +5% above companies that bet on their employees, being these results robust at 1% significance levels. This behaviour can be related to the path dependency of HPWS. Companies that are more human-capital-intensive and publicly reputed for its treatment, have fewer concerns about variations of their level of fixed assets. Seemingly, their operational performance is based on the quality of their employees and not necessarily on the quantity of fixed assets owned.

The main results indicate that companies that treat their employees better earn superior operational returns not necessarily from an increase of productivity of their workers in terms of sales per employee, but rather from a more efficient management of costs. The positive impact of a better cost managing structure is even sufficient to compensate the higher wages that Best Companies pay to their employees in relation to their peers. The higher levels of efficiency are also visible in terms of capital utilisation where Best Companies exhibit superior capacity in managing their operating working capital. The main plea summarizing these findings can be stated as:

Companies that are taking better care of their employees are seeing their employees taking better care of it

And this is translating into significantly higher margins that ultimately result in higher levels of overall abnormal operational performance.

In addition, by using job satisfaction as a mechanism to promote efficiency and performance, Best Companies manage to carry less debt and to rely more on human capital as a productive asset.

5.3 Discussion

5.3.1 Interpreting the results

The differences in margins uncovered in the previous sections seem to play a key role in explaining the superior operational performance of companies that present high levels of employee satisfaction.

The operational margins (both in terms of personnel costs and other operating expenses) assume a key role as explanatory variables in the performance and operational value creation of all companies studied. Nevertheless, the cost structures of the two kinds of companies are considerably different. When unveiling the roots of the differences in margins, it is surprising that companies with better employee relations are bearing more labor costs per employee without enjoying an increase of sales per employee. Hence, there is no support for theories that employee satisfaction result in better productivity through an increase of sales (possibly through a mechanism of superior customer satisfaction).

In fact, the research evidences that the superior EBITDA margins that the sample portfolio firms show are coming mainly from two key areas: a superior efficiency in managing all other costs that do not concern labor costs and an increase in productivity and efficiency (measured in terms of operating working capital per sales).

The superior wages that companies are paying to their employees are being over-compensated with an extraordinary care in terms of project managing by the workers.

Furthermore, the study unveiled the existence of differences in the capital structure of both types of companies, establishing some correlations and contradictions with the stakeholder theory of capital structure and agency cost theory. In this case, there is strong support for the stakeholder theory of capital structure as companies with higher levels of employee relations have significantly lower debt ratios (consistent when measure for Total Debt and Long-term Debt). However, according to Jensen (1986), the

free cash flow theory defends the importance of debt as a disciplinary mechanism to control for over-investment and inefficient project management. The results obtained, despite not confirming a particular role of debt in the performance of any of the companies, provide evidence that companies with higher employee relations achieve even better levels of efficiency and productivity without needing to resort to high levels of leverage as a disciplinary mechanism. Thus, we provide proof that job satisfaction can serve as a more powerful mechanism of efficiency and productivity than debt and, mainly, that the increased costs associated with it are overcompensated by the benefits of a superior cost managing capability.

Furthermore, when using Long-Term Debt the explanatory variable of leverage in the regressions, we find that although it is not a driver of performance in “Best Companies To Work For”, it is significantly relevant in the Control Firms. These results open the floor to discussion in terms of long-term liability management. Indeed, Becker and Huselid (1996) note that a High Performance Workplace is characterized by a path dependency (Collis and Montgomery, 1995). Firms cannot simply implement these best practices immediately. However, it seems that firms that do not privilege employee relations are more dependent of their long-term leverage ratios.

5.3.2 Fit with past literature

The experience of creating the sample database has revealed that the use of accounting data requires a great degree of care, as it is prone to bias in terms of unconsolidated and consolidated accounts as well as misspecification and different accounting fiscal periods. Nevertheless, it allowed focusing the research in a rarely studied market in terms of job satisfaction and operational performance: the European Market. The results are particularly pioneer for including sample companies from 15 different European markets with differences among them. By doing so, we address a gap in the literature of validating the robustness in past literature by applying it to Europe.

This thesis addresses the gap between the accepted benefits of job satisfaction in the managerial literature and the contradictory past research of the area through the scopes of finance and economics. We aimed at translating the benefits to an operational perspective that could serve as a close bridge between the managerial and financial lens. By doing so, although using different variables of analysis, we find three different levels of support: First, we find possible evidence supporting the stakeholder-oriented

corporate governance structure, discovering potential for new starting points of analysis, contributing for the long-lasting debate of two law professors in 1932 (Adolph Berle and Merrick Dodd in Harvard Law Review), concerning the shareholder and stakeholder approach. Secondly, we show that consistent with past literature on Human Resource Management (Huselid, 1995; Becker & Huselid, 1998) and Implicit Contracts (McNeil, 1974; Moussu, 2000), firms have performance advantages in investing in their relations with employees and addressing job satisfaction. Thirdly, we add to Edmas (2011) view that urges a fragmented approach to CSR studying, here focused on employee relations – “CSR comprises a myriad of different dimensions (...) Lumping together several different dimensions may lead to insignificant results”.

Fourthly, and most important, we provide evidence to the positive link between job satisfaction and performance and we shed light on what are the drivers of the abnormal operational performance in the European Market. In the process, we further confirm the stakeholder theory of capital structure as well as find evidence to Maksimovic and Titman (1991) and Myers (1976) that firms investing more in employee benefits will tend to have lower debt ratios (although both theories differ in cause and effect). In addition, we unveil interesting results concerning the disciplinary role of debt and the free cash flow theory (Jensen, 1986) where the results might indicate that companies with high job satisfaction use it as an alternative mechanism to promote project management and cost efficiency instead of debt, and thus, being able to benefit from lower debt ratios.

5.4 Limitations and Further Research

5.4.1 Limitations of the study

The study of the proposed thematic required several simplifications that freed its viability. The first one concerns the fact that while measuring performance using operational and accounting data, there is no accepted way to control accounting variables for risk. Furthermore, still related with our data, the unavailability of information of some companies raised three key issues: Firstly, it forced the sampling process to filter for larger companies that would provide more complete available information while assuring that the job satisfaction levels was rooted in the opinion of a

multitude of individuals. Nevertheless, it creates a problem of over-representativeness of large organizations. Secondly, not all companies had available information to all the required years, which obliged to filter the observations that did not have a matching pair. In addition, the fact the period of 2003-2007 counts with more years (and therefore more observations) than 2008-2011, imposes a problem of biasing due to over-representativeness of pre-crisis period. However, given the significance of the results, this limitation is reduced. Thirdly, there are limitations in terms of the reduced sample size by country. Given that each of the 15 countries participates with only a small number of companies to the overall portfolio, we encounter some limitations as to the solidity of the cross-national conclusions that can be retrieved.

Finally, the existence of some restrictions of the database, that did not provide detailed information on components such as “Cost of Goods Sold”, “Gross Profit”, “Financial Debt” and others, impeded a more complete and detailed analysis of each variable and driver of performance in particular. Moreover, ideally the size matching would have been done with the values of Total Assets of the first appearance of each sample company on the list. However, we met database restrictions as to obtain available peer matching tools that dated before 2010.

5.4.2 Further Research

Further research on this topic could aim at focusing on addressing the limitations covered in the previous section. In addition, there is a strong interest in developing the determinants behind cross-national differences and its implications in terms of alternative links between performance and satisfaction. There might be several scenarios where job satisfaction is more or less valued between countries or where differences in employee treatment between companies that make the list and companies that do not are more or less emphasized.

Another possible area of further research would be to complement cross-national and cross-industry analysis, to study the existence of patterns and predominant results across industries depending on their country of domicile.

Finally, the results obtained can be matched with research on corporate governance structures and its implications to employee satisfaction and operational performance in Europe. The present thesis does not discriminate between public and private companies

in terms of ownership structure. Nevertheless, it would be a fundamental next step to address in the near future.

In the end, the hope relies in successfully linking the managerial and financial perspectives in serving the demonstration that with adequate consideration of stakeholders, shareholders can increase their own value.

5.5 Managerial Implications

Investment in Human Capital in terms of workplace environment and job satisfaction is not a highly consensual decision among managers when it comes to decide where to apply corporate funds. Although its importance is recognized, there is a dubious environment regarding up to what extent it is truly a differentiating investment and, above all, a fruitful one.

The grounds to such doubtful milieu come from two main concerns: On the one hand, High Performance Workplaces are a long-term strategic commitment that requires a sacrifice of flexibility in terms of HR Policies. Firms cannot simply implement these best practices immediately, hence creating a high level of path dependency. On the other hand, in addition to the previous concern, investment in Human Capital is an intangible venture that can be quite moratory to translate into tangible results. Hence, the maturity and intangibility of such investment trigger frictions at a managerial level. It is therefore important to understand in which areas specifically can firms expect the results to materialize and what secondary effects can they take advantage of when opting for a “Best Company to Work For” policy.

The results of this study show that companies with high levels of job satisfaction, specially measured by a highly reputed and public measure, enjoy superior levels of operational performance when compared to their peers. These results are consistent at an operational level through several profitability lenses.

This thesis unveils three main areas of managerial conclusions.

Firstly, although many studies defend the link between satisfaction and job performance in terms of higher productivity measured by the level of outputs, the abnormal operational performance is coming from superior efficiency of employees in dealing

with costs, project managing and capital utilization proficiency. Indeed, companies with high levels of job satisfaction enjoy greater margins, despite having significantly higher labour costs per employee and not necessarily higher average levels of sales. The firms in our sample proved to be resorting to an improved cost managing and capital utilisation capability to achieve higher margins even when paying higher wages. Hence, the plea behind the first implication is: “Companies that take care of their employees are even better taken care of by them”.

The second fundamental implication is highly related with the precedent one. There is strong evidence that wages constitute a prime tool of motivation for employees. Without disregarding possible alternative means of motivating employees in terms of workplace environment and non-costly benefits, this study finds that “Best Companies to Work For” pay reliably higher wages. These higher wages are, nevertheless, over-compensated in terms of final positive impact by the margins increase obtained by decreasing other costs.

The final managerial conclusion relates to the company’s capital structure. Our research shows that companies that privilege employee satisfaction enjoy a higher ability of capital management (measured by the operating working capital employed per unit of sales) while maintaining at the same time lower debt levels. Indeed, although one must recognize the existence of other variables involved, good employee relations emerge as a strong complementary mechanism of discipline and efficiency to debt. The firms under scope manage to achieve high levels of efficiency without resorting necessarily to higher levels of debt. This finding opens the floor to secondary benefits to be enjoyed by managers when investing in human capital such as a higher financial slack, highly needed when pursuing different investment opportunities.

6. Conclusion

This paper addresses the operational value creation mechanisms of companies with high levels of job satisfaction (as measured by consistent inclusion in the “Best Companies to Work For” list). Under the assumption that both human motivational factors and the link between satisfaction and performance are dependent on the external environment, we undertook a cross-country (through 15 different European Countries) and cross-time (studying two different growth periods) analysis of abnormal operational performance in companies with outstanding employee relations.

A benchmark group based on geography, industry and size was identified as a source of expected performance. We find that companies with superior employee relations demonstrate superior operational performance (measured by EBITDA/Assets) of +6.6% during the period of 2003-2011. These results are robust both in periods of economic growth and recession where “Best Companies to Work For” enjoy superior performance up to +7% and 5.9%, respectively. In addition, excluding for outliers, a company’s inclusion in the list does not play a significant key role only in countries where the general standard working conditions are superior (Austria, Denmark and Finland and Sweden).

We undertake deeper research into the drivers of operational performance in both types of companies and unveil that the difference resides mainly on their operational margins. Interestingly, we find that companies with better employee relations are bearing more labor costs per employee without enjoying an increase of sales per employee. Hence, there is no support for theories that employee satisfaction result in better productivity through an increase of sales (possibly through a mechanism of superior customer satisfaction). In fact, the superior operational margins are explained by: a superior efficiency in managing all other costs that do not concern labour costs and an increase in productivity and efficiency (measured in terms of operating working capital per sales).

Employee satisfaction is promoting superior cost organization and project managing by the company’s employees. Since these two capabilities are described in the literature as two components of the disciplinary role of debt (Jensen, 1986), this paper extended its analysis to the capital structure of both types of companies.

We find that companies with higher levels of employee satisfaction have significantly lower debt ratios. This opens the floor of discussion to employee satisfaction as a complementary mechanism of promotion of efficiency within companies, with the added-benefit of freeing financial slack to pursue investment opportunities. Moreover, this thesis found that the long-term leverage ratio (as measured by Long-Term Debt/Total Assets) plays a key role as a driver of performance in the control companies. Thus, if we analyze employee relations as a long-term investment (path dependency) incorporated in the firm's overall business strategy, there is evidence that such a long-term vision is reducing the firm's long-term liability management needs. In fact, companies that are focused on the long-term horizon, explicit by their bet on human capital, are less constrained by the long-term leverage ratio in terms of performance.

Summing up, this paper corroborated the following hypotheses:

Table 13 – Hypotheses Corroboration

Hypotheses	Support
H1 <i>Best Companies enjoy superior operational performance compared to their peers</i>	YES
H2 <i>The crisis effect (2008-2011) is not significant in the superior operating performance of Best Companies compared to their respective peer group</i>	YES
H3 <i>H3: Best Companies enjoy superior operational performance across the 15 European countries</i>	NO
H4 <i>Personnel Costs in relation to number of employee increase in Best Companies compared to their respective peers</i>	YES
H5 <i>Sales per employee increase in Best Companies compared to their respective peer group</i>	NO
H6 <i>EBITDA / Sales increases in Best Companies compared to their respective peer group and it leads to improved operational performance</i>	YES
H7 <i>Net Working Capital / Sales decreases in Best Companies compared to their respective peer group and it leads to improved operational performance</i>	YES
H8 <i>Fixed Assets/Total Assets decreases in Best Companies compared to their respective peer group</i>	YES
H9 <i>Best Companies have more conservative debt ratios than their respected peer group and it leads to improved operational performance</i>	YES/NO

“Take care of your people, and they’ll take care of you”

Military Army saying

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Appendix

Table 14 – Resume of past Literature

This table reports the main literature concerning the link between satisfaction and operational performance. The list is particularly focused on managerial and financial literature rather than the psychological and individual focus of analysis.

Author / Year of Study	Country	Sample	Findings
Iaffaldano & Muchinsky (1985)	Worldwide literature	Meta-analysis of satisfaction-performance literature	The relationship between job satisfaction and performance is purely intuitive. The correlation between job satisfaction and performance is merely 0.17.
Ostroff (1992)	Worldwide literature	Worldwide literature	The strength of the HRM system influences how individual employee attributes accumulate to affect organizational effectiveness.
Lau & May (1998)	US	58 US "Best Companies" + 88 "S&P"	Findings of this study suggest that companies with high quality of work life can also enjoy exceptional growth and profitability
Filbeck & Pearce (2003)	US	"Best Companies to Work For in America"	The study examines long-term performance by calculating raw and risk-adjusted returns and then comparing them to the returns of a matched sample of firms. In addition, the study calculates the return on a buy and holds investment in the sample firm less the return on a buy-and-hold investment in a matched sample firm (BHARs). They find a statistically significant positive response to the announcement of the '100 best companies to work for' by Fortune
Galema et al. (2008)	US	US Portfolios	The study relates US portfolio returns, book-to-market values and excess stock returns to different dimensions of socially responsible performance. It finds that socially responsible investing (SRI) impacts on stock returns by lowering the book-to-market ratio and not by generating positive alphas. It finds employee relations as the area with the highest impact
Statman & Glushkov (2009)	US (1992-2007)	US Portfolios ranked by KLD	The study analyses returns during 1992-2007 of stocks rated on social responsibility by KLD and find that this tilt gave socially responsible investors a return advantage relative to conventional investors. The return advantage of tilts toward stocks of companies with high social responsibility scores is largely offset however by the return disadvantage that comes from the exclusion of stocks of 'shunned' companies
Guenster et al. (2010)	US (1997-2004)	US Portfolios	The study analyses the relation between eco-efficiency and financial performance from 1997 to 2004. It reports that eco-efficiency relates positively to operating performance and market value. Moreover, the results suggest that the market's valuation of environmental performance has been time variant, which may indicate that the market incorporates environmental information with a drift.
Edmans (2011)	US (1984-2009)	100 Best Companies to Work For in US	A value-weighted portfolio of the "100 Best Companies to Work For in America" earned an annual four-factor alpha of 3.5% from 1984-2009, and 2.1% above industry benchmarks
Girerd-Potin et al. (2012)	Europe (2003-2010)	Vigeo Rated Companies	This study's main results are that, for each SR dimension, investors ask for an additional risk premium when they decide to hold non SR stocks. The cost of equity is thus lower for socially responsible firms. The average premium over the period 2003-2010 is larger for the components "direct non-financial stakeholders" and "financial stakeholders" than for the component "indirect stakeholders".

Table 15 - Summary Statistics for Mean, Median, Std. Deviation and first and third quartile (by Year)

The table reports Summary Statistics of the years there is sufficient information to compare a company with its peer firm. ROA, Sales/Assets, EBITDA/Sales, Labour/Sales, Other Costs/Sales, Fixed Assets/Total Assets, Leverage Ratios and Operating Working Capital/Sales are presented in percentage points. Labour Costs per Employee and Sales per Employee are presented in thousands of euros. Size is computed as the Log of Total Assets. All the measures are computed using the observations from the entire time period (2003-2011). No distinction is made across the type of company.

Variables	Before Crisis [2003-2007]					Crisis [2008-2011]				
	Mean	Std. Dev.	Q1	Median	Q3	Mean	Std. Dev.	Q1	Median	Q3
A. Profitability										
ROA	14.91%	12.03%	6.87%	12.61%	21.38%	12.84%	11.79%	4.91%	10.72%	19.20%
Sales / Assets	183.50%	144.37%	102.72%	158.22%	228.00%	170.91%	110.62%	86.88%	156.31%	224.35%
EBITA / Sales	11.40%	11.40%	4.61%	9.00%	14.75%	10.14%	11.26%	3.37%	7.74%	14.04%
B. Cost Structure										
Labour / Sales	27.71%	19.77%	13.35%	20.48%	39.71%	29.86%	20.20%	14.29%	22.97%	42.68%
Other Costs / Sales	67.54%	25.08%	52.22%	73.42%	85.54%	67.03%	25.10%	51.27%	73.14%	84.90%
C. Employment										
Labour Costs per Employee	65.7012	35.2547	42.4085	57.9294	79.3968	76.3159	44.2888	45.8081	66.4130	94.63317
Sales per Employee	361.750	363.441	184.825	269.042	437.937	367.622	455.904	166.695	261.340	414.6944
D. Capital Structure and Efficiency										
Fixed Assets / Total Assets	32.87%	26.47%	9.52%	26.65%	51.01%	32.29%	27.24%	8.00%	24.45%	52.17%
Operating Working Capital / Sales	16.13%	16.86%	5.15%	14.25%	23.99%	17.28%	18.05%	6.10%	13.98%	27.63%
Debt / Total Assets	62.98%	27.26%	47.01%	64.61%	80.08%	62.37%	22.54%	46.84%	64.78%	80.00%
LT Debt / Total Assets	13.36%	17.46%	0.87%	6.30%	18.63%	14.79%	18.46%	1.48%	8.03%	22.51%
Size	2.1890	0.3233	1.9779	2.1498	2.3760	2.2313	0.3217	2.0089	2.1579	2.4363

Table 16 – Summary Statistics for Mean, Median, Std. Deviation and first and third quartile (by Country)

The table reports Summary Statistics of the years there is sufficient information to compare a company with its peer firm. All ratios are presented in percentage points. Labour Costs per Employee and Sales per Employee are presented in thousands of euros. Size is computed as the Log of Total Assets.

Variables	Austria		Belgium		Denmark		Finland		France		Germany		Greece		Ireland	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
A. Profitability																
ROA	15.18%	12.56%	12.46%	9.81%	14.45%	15.49%	20.72%	17.82%	15.69%	12.62%	13.45%	11.39%	17.67%	15.35%	12.02%	8.57%
Sales / Assets	200%	195%	196%	204%	.	.	224%	184%	148%	154%	140%	101%	127%	131%	.	.
EBITA / Sales	8.89%	9.21%	9.73%	8.09%	.	.	14.00%	9.51%	15.26%	10.41%	11.02%	12.75%	14.81%	14.72%	.	.
B. Cost Structure																
Labor / Sales	22.43%	21.12%	37.75%	30.16%	.	.	22.54%	13.79%	25.10%	18.14%	29.68%	27.20%
Other Costs / Sales	77.46%	79.25%	60.77%	69.83%	.	.	72.90%	84.59%	68.87%	73.51%	66.29%	67.50%
C. Employment																
Labour Costs per Employee	71.0139	58.8009	79.883	71.9996	89.3518	72.5901	52.8802	53.2193	75.6625	66.2797	64.765	62.1111	.	.	62.9379	58.6099
Sales per Employee	334.099	322.807	276.383	246.588	.	.	295.193	258.535	386.104	282.956	268.664	218.348	368.192	290.204	.	.
D. Capital Structure and Efficiency																
Fixed Assets / Total Assets	43.24%	37.78%	36.04%	30.27%	40.18%	40.15%	39.83%	33.45%	42.70%	43.38%	34.91%	39.05%	36.58%	31.89%	40.66%	30.43%
Operating Working Capital / Sales	6.17%	6.20%	12.65%	10.89%	.	.	9.10%	6.31%	11.51%	10.54%	15.80%	12.37%	28.89%	24.10%	.	.
LT Debt / Total Assets	23.50%	16.26%	7.47%	0.66%	12.31%	6.18%	13.79%	5.87%	12.33%	7.18%	35.35%	36.35%	13.88%	10.01%	12.92%	7.15%
Size	4.97005	4.96064	5.00763	4.87925	5.06556	4.94057	4.78695	4.88689	5.66913	5.64995	5.57283	5.49156	5.13957	4.91246	5.3334	5.03477

Variables	Italy		Netherlands		Norway		Portugal		Spain		Sweden		UK	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
A. Profitability														
ROA	13.74%	11.93%	13.02%	8.99%	9.99%	9.80%	12.49%	9.78%	11.86%	9.85%	19.04%	16.38%	13.16%	11.68%
Sales / Assets	147%	138%	205%	239%	149%	148%	153%	130%	185%	180%	268%	194%	.	.
EBITA / Sales	9.98%	9.24%	8.67%	3.24%	9.70%	6.29%	7.87%	6.38%	9.23%	5.97%	9.24%	6.31%	.	.
B. Cost Structure														
Labor / Sales	22.95%	16.94%	29.29%	14.62%	39.53%	39.54%	16.87%	13.32%	22.67%	19.48%	39.24%	38.28%	.	.
Other Costs / Sales	75.46%	80.83%	67.10%	82.12%	54.70%	54.95%	80.24%	85.21%	76.36%	79.41%	48.10%	49.56%	.	.
C. Employment														
Labour Costs per Employee	75.0441	67.7774	51.3516	48.4431	79.9264	80.0199	31.977	28.5814	63.1861	62.2649	88.5614	76.0369	64.7363	51.1273
Sales per Employee	439.399	365.376	314.941	275.178	366.119	218.043	292.59	203.652	411.743	298.58	272.983	157.297	.	.
D. Capital Structure and Efficiency														
Fixed Assets / Total Assets	24.83%	19.08%	27.09%	18.68%	34.41%	22.82%	17.01%	13.81%	25.43%	17.70%	19.97%	8.16%	32.94%	32.83%
Operating Working Capital / Sales	21.86%	21.80%	21.81%	22.21%	14.71%	15.63%	30.32%	32.66%	27.79%	24.11%	8.54%	6.96%	.	.
LT Debt / Total Assets	18.87%	13.32%	12.77%	4.19%	18.31%	6.36%	8.95%	6.90%	10.79%	3.29%	.	.	14.45%	7.10%
Size	5.10019	5.05925	4.82569	4.59669	4.78071	4.74804	4.85918	4.64101	5.19067	5.31493	4.42547	4.50682	5.26663	5.00873

Table 17 - Multivariate and Univariate Regressions on Abnormal Operational Performance in “Best Companies to Work For”

This table reports the coefficient estimates of OLS regressions. The dependent variable is the ROA during the period in analysis (2003-2011). ROA is defined as EBITDA/Assets. Best Companies are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are peers companies matched by geography, industry and size. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression. Best Companies present higher operational performance independently of the variables and controls used.

	Return On Assets (1)	Return On Assets (2)	Return On Assets (3)
Best Company	0.066 *** (11.45)	0.0692557 *** (12.36)	0.070 *** (12.81)
Size		-0.0320361 *** (-9.12)	-0.035 *** (-8.31)
After Crisis			-0.017 *** (-3.05)
Country Dummies	No	No	Yes
Observations	1614	1614	1606
R-squared	0.0752	0.1146	0.1816

Figure 5 – ROA distribution output by main variables (full sample)

This figure presents the distribution of Return on Assets, here measured as EBITDA/Sales, vis-à-vis variables of FA/TA, NWC/Sales, Leverage Ratio, EBITDA/Sales, Labour/Sales and Other Costs/Sales. The full sample was used for the computation of the presented graph matrixes.

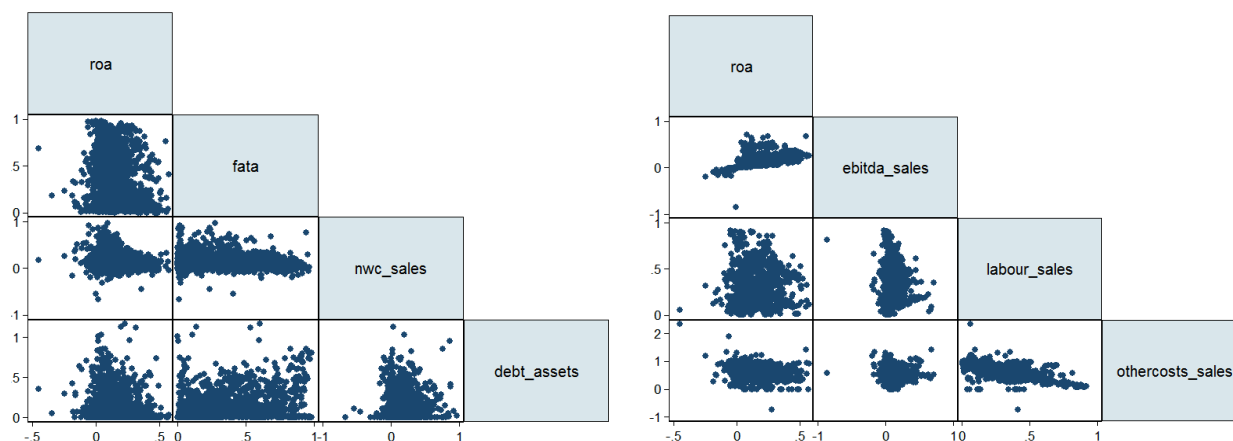


Table 18 - Differences of ROA by Country, controlled for Size and Crisis Dummy

This table reports the coefficient estimates of OLS regressions. The dependent variable is the ROA during the period in analysis (2003-2011). ROA is defined as EBITDA/Assets. Best Companies are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are peers companies matched by geography, industry and size Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. After Crisis is a dummy variable to control for the effect of the financial crisis in Europe after 2007. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

Variables	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland
	ROA	ROA	ROA	ROA	ROA	ROA	ROA	ROA
Size	-0.056 *	-0.056 ***	-0.028	-0.101 ***	-0.060 ***	0.028 ***	-0.021	-0.056 ***
	(-1.92)	(-11.38)	(-0.98)	(-4.96)	(-4.92)	(3.68)	(-1.57)	(-3.06)
Best Company	0.050	0.086 ***	0.015	0.032	0.122 ***	0.184 ***	0.088 ***	-0.024
	(1.64)	(6.55)	(0.43)	(1.56)	(9.58)	(9.07)	(3.15)	(-0.86)
After Crisis	-0.041	-0.016	-0.016	-0.029	-0.036 **	-0.041 **	-0.098 ***	-0.022
	(-1.36)	(-1.20)	(-0.52)	(-1.34)	(-2.43)	(-2.15)	(-3.11)	(-0.72)
Observations	42	202	58	112	180	82	54	42
R-squared	0.1675	0.3135	0.0232	0.2323	0.3836	0.5318	0.3126	0.2751

Variables	Italy	Netherlands	Norway	Portugal	Spain	Sweden	UK
	ROA	ROA	ROA	ROA	ROA	ROA	ROA
Size	0.006	0.002	0.017	-0.093 ***	0.008	-0.072 **	-0.011
	(0.36)	(0.07)	(0.77)	(-5.54)	(0.43)	(-2.45)	(-1.08)
Best Company	0.080 ***	0.073	0.068 ***	0.047 **	0.084 ***	0.036	-0.052 *
	(5.02)	(1.31)	(4.09)	(2.02)	(5.33)	(1.39)	(-1.98)
After Crisis Dummy	-0.008	-0.143 *	-0.011	0.003	-0.026	0.029	0.014
	(-0.51)	(-1.77)	(-0.65)	(0.11)	(-1.62)	(1.12)	(0.50)
Observations	150	26	174	66	170	130	62
R-squared	0.142	0.2427	0.0971	0.2587	0.1555	0.0381	0.091

Table 19 – The Crisis Effect on “Best Companies to Work For”

This table presents the differences in profitability in “Best Companies to Work For” after and before the financial crisis of 2007. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. The coefficients of the difference are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests, Wilcoxon ranksum (Mann-Whitney) tests and univariate regression.

Variables	Before (2003-2007)		After (2008-2011)		t-statistics (t - tests)	z-statistics (Wilcoxon tests)
	Mean	Median	Mean	Median		
ROA	18.40%	17.43%	15.79%	14.13%	-2.61% ***	-3.30% **
Sales / Assets	190.23%	175.16%	178.49%	177.47%	-11.74%	2.31%
EBITA / Sales	13.31%	10.47%	11.51%	8.67%	-1.80% **	-1.80% **

Table 20 - The Crisis Effect on Control Companies

This table presents the differences in profitability in Control Firms after and before the financial crisis of 2007. Peer firms are control companies matched by geography, industry and size to a sample portfolio of Best Companies. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. The coefficients of the difference are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests, Wilcoxon ranksum (Mann-Whitney) tests and univariate regression.

Variables	Before (2003-2007)		After (2008-2011)		t-statistics (t - tests)	z-statistics (Wilcoxon tests)
	Mean	Median	Mean	Median		
ROA	11.42%	9.63%	9.89%	8.16%	-1.53% **	-1.47% ***
Sales / Assets	176.84%	138.72%	163.37%	138.27%	-13.48%	-0.45%
EBITA / Sales	9.56%	7.36%	8.82%	5.60%	-0.73%	-1.76% **

Table 21 – Multivariate Regressions on Abnormal Levels of Sales per Employee

This table reports the coefficient estimates of OLS regressions. The dependent variable is the Sales per Employee during the period in analysis (2003-2011). Sales per Employee are defined as Total Sales/No. of Employees. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. After is a dummy variable to control for the effect of the financial crisis in Europe in 2007. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

	Sales per Employee (1)	Sales per Employee (2)	Sales per Employee (3)	Sales per Employee (4)
Best Company	21.96533 (0.88)	17.99064 (0.74)	17.99312 (0.74)	14.75467 (0.63)
Size		54.43222 *** (3.27)	54.37976 *** (3.29)	40.68326 * (1.93)
After Crisis Dummy			1.307634 (0.05)	9.202654 (0.34)
Country Dummies	No	No	No	Yes
Observations		1046	1046	1046
R-squared	0.0008	0.0098	0.0098	0.0556

Table 22 – Multivariate Regressions on Abnormal Levels of Labor Costs per Employee

This table reports the coefficient estimates of OLS regressions. The dependent variable is the Labor per Employee during the period in analysis (2003-2011). Labor per Employee is defined as Personnel Costs/No. of Employees. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. After is a dummy variable to control for the effect of the financial crisis in Europe in 2007. The coefficients of the regressions are presented on the first line for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels. The numbers in brackets underneath each coefficient are the t-statistics from the heteroskedasticity-robust regression.

	Labour per Employee (1)	Labour per Employee (2)	Labour per Employee (3)	Labour per Employee (4)
Best Company	16.27252 *** (7.51)	16.69147 *** (7.70)	16.66989 *** (7.76)	18.12814 *** (8.94)
Size		-3.013839 ** (-2.05)	-3.392176 ** (-2.31)	-2.228356 (-1.25)
After Crisis			10.77977 *** (4.72)	9.996801 *** (4.83)
Country Dummies	No	No	No	Yes
Observations	1274	1274	1274	1266
R-squared	0.0426	0.0459	0.0638	0.1706

Table 23 – Differences in Margins between Best Companies and their Peers

This table reports differences in EBITDA margins, here measured by EBITDA/Sales, between “Best Companies to Work For” and their peers. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the last column for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests and Wilcoxon ranksum (Mann-Whitney) tests.

Statistics	Full Sample		Combined	Difference
	Best Companies	Control Firms		
Mean p-value	12.64%	9.28%	10.93%	3.36% *** (-5.4342)
Median p-value (wilcoxon test)	9.70%	6.64%	8.38%	3.06% *** (-7.432)
Standard Deviation	10.93%	11.53%	11.36%	
Min	-17.50%	-85.80%	-85.80%	
Max	68.11%	71.67%	71.67%	
25th percentile	5.58%	2.70%	4.18%	
75th percentile	16.50%	12.74%	14.58%	

**Table 24 – Differences in Cost Structure between Best Companies and their Peers
(Labour Costs / Sales)**

This table reports differences in Cost Structure, here measure by the ratio Labour Costs/Sales, between “Best Companies to Work For” and their peers. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the last column for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests and Wilcoxon ranksum (Mann-Whitney) tests.

Statistics	Full Sample		Combined	Difference
	Best Companies	Control Firms		
Mean p-value	31.31%	25.91%	28.51%	5.40% *** (-4.7649)
Median p-value (wilcoxon test)	26.06%	20.54%	21.56%	5.51% *** (-4.319)
Standard Deviation	20.53%	19.05%	19.95%	
Min	1.12%	0.45%	0.45%	
Max	89.77%	91.99%	91.99%	
25th percentile	14.48%	13.11%	13.95%	
75th percentile	44.79%	34.20%	41.11%	

**Table 25 – Differences in Cost Structure between Best Companies and their Peers
(Other Operating Costs / Sales)**

This table reports differences in Cost Structure, here measured by the ratio Other Costs/Sales, between “Best Companies to Work For” and their peers. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the last column for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests and Wilcoxon ranksum (Mann-Whitney) tests.

Statistics	Full Sample		Combined	Difference
	Best Companies	Control Firms		
Mean p-value	64.28%	70.18%	67.35%	-5.89% *** (4.1490)
Median p-value (wilcoxon test)	71.04%	75.38%	73.30%	-4.34% *** (4.675)
Standard Deviation	25.16%	24.69%	25.08%	
Min	-74.20%	0.00%	-74.20%	
Max	188.90%	233.29%	233.29%	
25th percentile	46.18%	56.85%	52.14%	
75th percentile	82.89%	87.54%	85.25%	

**Table 26 – Differences in Capital Utilization Efficiency between BC’s and Peers
(Net Working Capital / Sales)**

This table reports differences in capital utilization efficiency, here measured by NWC/Sales, between “Best Companies to Work For” and their peers. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the last column for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests and Wilcoxon ranksum (Mann-Whitney) tests.

Statistics	Full Sample		Combined	Difference
	Best Companies	Control Firms		
Mean p-value	15.58%	17.50%	16.55%	-1.92% ** (1.9986)
Median p-value (wilcoxon test)	12.39%	16.09%	14%	-3.70% *** (2.704)
Standard Deviation	18.14%	16.42%	17.31%	
Min	-66.44%	-54.15%	-66.44%	
Max	96.74%	91.89%	96.74%	
1st percentile	-16.10%	-11.39%	-14.51%	
99th percentile	73.99%	75.73%	75.73%	

**Table 27 – Differences in Capital Structure between Best Companies and their Peers
(Total Debt / Total Assets)**

This table reports differences in capital structure, here measured by Debt/Assts, between “Best Companies to Work For” and their peers. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the last column for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests and Wilcoxon ranksum (Mann-Whitney) tests.

Statistics	Full Sample		Combined	Difference
	Best Companies	Control Firms		
Mean p-value	61.56%	63.93%	62.74%	-2.38% * (1.8590)
Median p-value (wilcoxon test)	63.35%	65.76%	64.70%	-2.41% ** (1.980)
Standard Deviation	25.87%	25.20%	25.56%	
Min	0.86%	0.79%	0.79%	
Max	388.00%	268.58%	388.00%	
1st percentile	7.62%	5.11%	6.71%	
99th percentile	100.71%	107.51%	101.25%	

**Table 28 – Differences in Capital Structure between Best Companies and their Peers
(Long-term Debt / Total Assets)**

This table reports differences in capital structure, here measured by Long-term Debt/Assets, between “Best Companies to Work For” and their peers. BC’s are companies that ranked consistently in the “Best Company to Work For” list of their own country in the period from 2003-2009. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Control firms are their peers matched by geography, industry and size. The coefficients of the difference are presented on the last column for each variable, where *, ** and *** represent their significance at 10%, 5% and 1% levels, using T-tests, Wilcoxon ranksum (Mann-Whitney) tests and univariate regression.

Statistics	Full Sample		Combined	Difference
	Best Companies	Control Firms		
Mean p-value	12.12%	15.69%	13.91%	-3.57% *** (4.0119)
Median p-value (wilcoxon test)	5.27%	9.11%	6.86%	-3.84% *** (3.984)
Standard Deviation	16.33%	19.10%	17.86%	
Min	0.00%	0.00%	0.00%	
Max	85.60%	116.41%	116.41%	
1st percentile	0.00%	0.00%	0.00%	
99th percentile	74.96%	84.51%	76.11%	

Figure 6 – Sample’s Leverage and *Outlierness*

This chart presents the sample’s distribution according to *outlierness* and leverage. A single observation that is substantially different from all other observations can make a large difference in the results of a regression analysis. Outliers are defined as observations with large residuals (an observation whose dependent-variable value is unusual given its values on the predictor variables). High Leverage is defined as observations with an extreme value on a predictor variable (a measure of how far an observation deviates from the mean of that variable). The overall impact of an observations is obtained through its “influence” (an observation is said to be influential if removing the observation substantially changes the estimate of coefficients. Influence can be thought of as the product of leverage and *outlierness*).

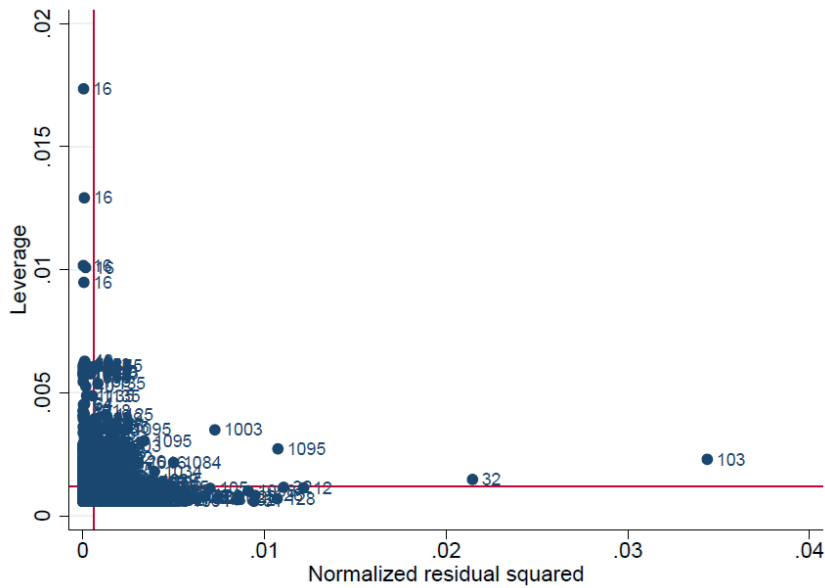


Figure 7 – Two-way Scatter Plot (ROA and Leverage)

This figure presents the distribution of Return on Assets, here measured as EBITDA/Sales, vis-à-vis the leverage ratios of companies. The fitted values line is obtained through a prediction based on current outcomes

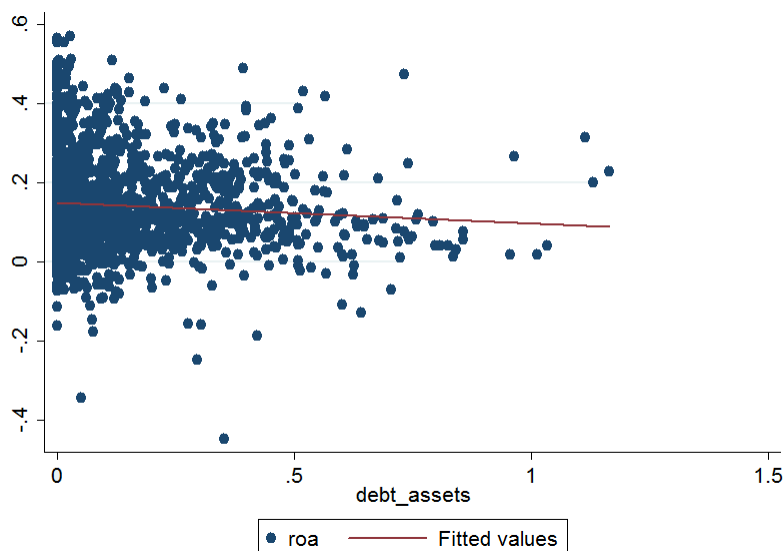


Table 29 – Correlation matrix for Best Companies Sample

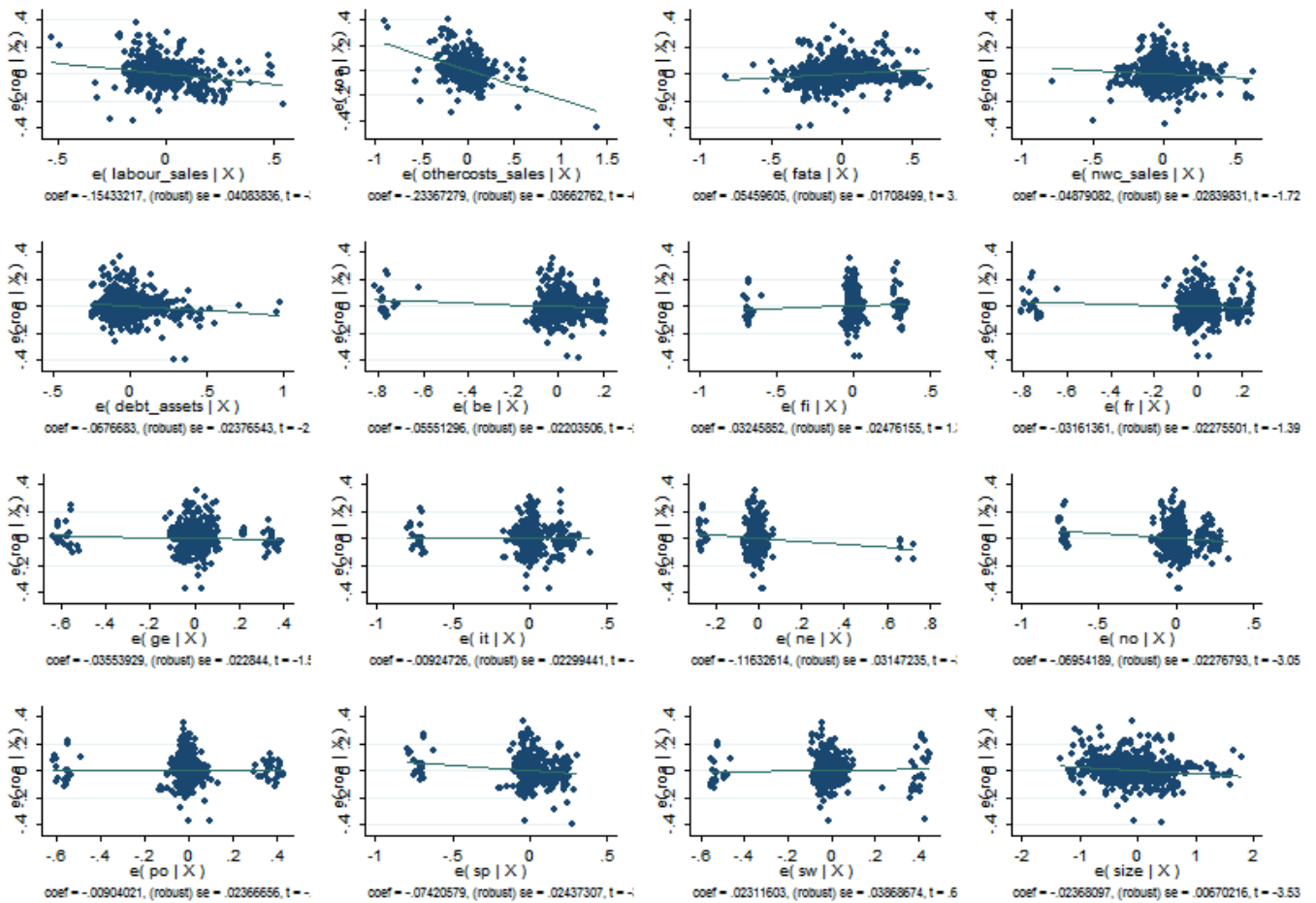
	ROA	Labour/Sales	O. Costs/ Sales	FA/TA	NWC/Sales	Debt/Assets	Size
ROA	1						
Labour/Sales	-0.0091	1					
Other Costs/Sales	-0.1573	-0.7535	1				
FA/TA	-0.0428	0.0015	-0.0711	1			
NWC/Sales	-0.3923	-0.1322	0.2279	-0.1049	1		
Debt/Assets	-0.0911	0.0371	-0.0136	-0.1388	0.1411	1	
Size	-0.1213	-0.3214	0.1673	0.3521	0.2266	-0.0484	1

Table 30 – Correlation Matrix for Control Firms

	ROA	Labour/Sales	Other Costs / Sales	FA/TA	NWC/Sales	Debt/Assets	Size
ROA	1						
Labour/Sales	0.0587	1					
Other Costs/Sales	-0.3007	-0.6726	1				
FA/TA	0.0198	-0.0609	0.1796	1			
NWC/Sales	-0.0925	-0.0006	-0.1088	-0.223	1		
Debt/Assets	-0.0496	0.0118	0.0435	-0.0692	0.0658	1	
Size	-0.2344	-0.2951	0.3256	0.4234	0.0202	-0.0979	1

Figure 8 - Added-Variables Plots of main variables

These charts are the added-variables plots of the main variables of the principal OLS regression on ROA. ROA is measured as EBITDA/Sales. This plot is also called a partial-regression plot and assumes particular utility in the finding for influential points. The line graph in each AV Plot has the same slope of the coefficient for that variable. Hence, points below or above the line are influencing its slope. A higher distance to the graph line translates in higher deviation and influence from a certain observation. BC's are companies that ranked consistently in the "Best Company to Work For" list of their own country in the period from 2003-2009 are considered in the sample. This list is compiled by the Great Place To Work® Institute and a multitude of national entities. Their peers are matched accordingly to a geographical, industrial and size criteria. Country dummies are dummy variables of 1 or 0 according to the country of origin of each company. The sample includes companies from 15 different European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and UK). Size is the logarithm of total assets. Leverage is the ratio of total debt to total assets. Operating Working Capital/Sales is defined as Short-term Debtors minus Short-term Creditors plus Stocks



Déclaration sur l'honneur

Je, soussigné(e), António Rui Torres de Araújo, certifie sur l'honneur que je n'ai rien plagié dans le travail ci-joint, ce qui signifie que je suis le seul auteur de toutes les phrases dont le texte est composé. Toute phrase ayant un autre auteur que moi a été mise entre guillemets, avec indication explicite de sa source. Je suis conscient(e) qu'en contrevenant à la présente règle je transgresse les principes académiques reconnus et m'expose aux sanctions qui seront prononcées par le conseil de discipline.

J'atteste également que ce travail n'a jamais été présenté dans le cadre d'études antérieures à ESCP Europe.

S'il s'agit d'un travail réalisé dans le cadre d'études effectuées en parallèle, je dois le préciser.

Les propos tenus dans ce mémoire n'engagent que moi-même.

Fait à Paris le 13 May 2013

Affidavit

I the undersigned, António Rui Torres de Araújo, certify on the honor that I have not plagiarized the paper enclosed, which means that I am the only author of all the sentences this text is composed of. Any sentence from a different author than me was written in quotation marks, with explicit indication of its source. I am aware that by contravening to the present rule, I break the recognised academic principles and I expose myself to the sanctions the disciplinary committee will decide on.

I also confirm this work has never been submitted during studies prior to ESCP Europe.

If this work has been written during studies conducted in parallel, I must precise it.

The remarks written in those pages only commit me.

Paris, 13th May 2013