

Employee Satisfaction, Labor Market Flexibility, and Stock Returns Around the World

Finance Working Paper N° 433/2014

May 2020

Alex Edmans

London Business School, CEPR and ECGI

Lucius Li

KFUPM Business School

Chendi Zhang

University of Exeter

© Alex Edmans, Lucius Li and Chendi Zhang 2020.
All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
http://ssrn.com/abstract_id=2461003

<https://ecgi.global/content/working-papers>

ECGI Working Paper Series in Finance

Employee Satisfaction, Labor Market Flexibility, and Stock Returns Around the World

Working Paper N° 433/2014

May 2020

Alex Edmans
Lucius Li
Chendi Zhang

We thank Seong Byun, Dan Cable, Francesco D'Acunto, Paul Edwards, Moqi Groen-Xu, Norbert Häring, Ioannis Ioannou, Frank Weikai Li, Dong Lou, Jong Min Oh, Andrew Oswald, Marco Pagano, Michael Parke, Madan Pillutla, Elena Simintzi, Jan Starmans, Vikrant Vig, Paolo Volpin, Bin Wang, and Tracy Wang, and conference/seminar participants at AFA, FIRS, LBS, LSE, Piraeus, SFS Cavalcade, and the Surrey-IFABS Conference for helpful comments.

© Alex Edmans, Lucius Li and Chendi Zhang 2020. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Abstract

We study the relationship between employee satisfaction and stock returns across 30 countries. Employee satisfaction is associated with superior long-run returns in flexible labor markets, such as the US and UK, but not rigid labor markets, such as Germany. Similar results hold for current valuation ratios, future profitability, and future earnings surprises, inconsistent with an omitted risk explanation and identifying channels through which employee satisfaction may affect stock returns. These results are consistent with employee satisfaction improving recruitment, retention, and motivation in flexible labor markets, where firms face fewer constraints on hiring and firing and employees have greater ability to respond to higher satisfaction. The findings have implications for the differential profitability of socially responsible investing strategies around the world – in particular, the importance of considering institutional factors when forming such strategies.

Keywords: Employee Satisfaction, Labor Market Flexibility, Socially Responsible Investing, Corporate Social Responsibility

JEL Classifications: G12, G23, G38, J53, J81, J83, J88, K31

Alex Edmans*

Professor of Finance
London Business School, Institute of Finance and Accounting
Regent's Park
London, NW1 4SA, United Kingdom
phone: +44 20 700 082 58
e-mail: aedmans@london.edu

Lucius Li

Assistant Professor in Finance
KFUPM Business School, Department of Accounting and Finance
Academic Belt Road
Dhahran, Eastern Province 31261, Saudi Arabia
e-mail: lu.li@kfupm.edu.sa

Chendi Zhang

Professor of Finance and Director of Research
University of Exeter, Business School
Streatham Court, Renner's Drive
Exeter, EX4 4PU, United Kingdom
phone: +44 139 272 4483
e-mail: C.Zhang@exeter.ac.uk

*Corresponding Author

Employee Satisfaction, Labor Market Flexibility, and Stock Returns Around The World *

Alex Edmans^a

London Business School, CEPR, and ECGI

Lucius Li^b

KFUPM Business School

Chendi Zhang^c

University of Exeter

This draft: April 27, 2020

Abstract

We study the relationship between employee satisfaction and stock returns across 30 countries. Employee satisfaction is associated with superior long-run returns in flexible labor markets, such as the US and UK, but not rigid labor markets, such as Germany. Similar results hold for current valuation ratios, future profitability, and future earnings surprises, inconsistent with an omitted risk explanation and identifying channels through which employee satisfaction may affect stock returns. These results are consistent with employee satisfaction improving recruitment, retention, and motivation in flexible labor markets, where firms face fewer constraints on hiring and firing and employees have greater ability to respond to higher satisfaction. The findings have implications for the differential profitability of socially responsible investing strategies around the world – in particular, the importance of considering institutional factors when forming such strategies.

JEL classifications: G12, G23, G38, J53, J81, J83, J88, K31

Keywords: Employee Satisfaction, Labor Market Flexibility, Socially Responsible Investing, Corporate Social Responsibility

* We thank Seong Byun, Dan Cable, Francesco D'Acunto, Paul Edwards, Moqi Groen-Xu, Norbert Häring, Ioannis Ioannou, Frank Weikai Li, Dong Lou, Jong Min Oh, Andrew Oswald, Marco Pagano, Michael Parke, Madan Pillutla, Elena Simintzi, Jan Starmans, Vikrant Vig, Paolo Volpin, Bin Wang, and Tracy Wang, and conference/seminar participants at AFA, FIRS, LBS, LSE, Piraeus, SFS Cavalcade, and the Surrey-IFABS Conference for helpful comments.

^a Email: aedmans@london.edu, London Business School, Regent's Park, London NW1 4SA, UK.

^b Email: lu.li@kfupm.edu.sa, Department of Accounting & Finance, KFUPM Business School, P.O. Box 5075, KFUPM, Dhahran, Saudi Arabia 31261.

^c Email: c.zhang@exeter.ac.uk, University of Exeter Business School, Rennes Drive, Exeter EX4 4PU, UK.

This paper studies the relationship between employee satisfaction and stock returns around the world. Theory provides conflicting predictions as to whether employee satisfaction is beneficial for firm value. On the one hand, it can be a valuable tool for recruitment and retention. This is especially important in the modern firm, where rank-and-file employees are key assets, engaging in tasks such as product innovation, building customer and supplier relationships, and mentoring subordinates. Employee satisfaction can also be a valuable motivational tool. The above tasks are difficult to measure and thus motivate with the monetary “piece rates” often used in 20th-century manufacturing firms. This reduced effectiveness of extrinsic motivators increases the role for intrinsic motivators such as satisfaction. The efficiency wage hypothesis highlights numerous channels through which satisfaction may increase motivation. For example, Akerlof (1982) posits that employees view a positive working environment as a “gift” from the firm and respond with a “gift” of increased effort.¹

On the other hand, employee satisfaction can represent wasteful expenditure by management. Taylor (1911) argues that workers should be treated like any other input – management’s goal is to extract maximum output from them while minimizing their cost. Under this view, satisfaction is an indicator that employees are overpaid or underworked, both of which reduce firm value.

The relative importance of the above costs and benefits depends on the institutional context. In flexible labor markets, the recruitment benefits of satisfaction are more important since firms engage in more hiring – both because hiring is easier (due to fewer restrictions on the contracts firms can offer) and because firing underperformers is easier, creating more vacancies. The retention benefits are also more important because the rate of departures is higher. Rivals face fewer constraints on hiring away workers; in addition, the greater firing risk encourages employees to invest in general rather than firm-specific skills (Thelen (2001)), which increases their ability to be recruited elsewhere.

¹ These theories imply a high *level* of compensation, but do not suggest that the *form* of compensation should be in satisfaction compared to cash, which is believed to be fungible. However, Maslow (1943) and Herzberg (1959) stress that cash is only effective up to a point: once workers’ physical needs are met, they are motivated by non-pecuniary factors such as job satisfaction, which cannot be purchased with cash and can only be provided by the firm.

The motivational benefits of employee satisfaction are also likely greater in flexible labor markets. First, the motivational benefits from employee-friendly practices are stronger if these are not mandated by law and thus more likely to be seen as a “gift”. Second, the motivation to work hard to avoid being fired from a satisfying job (Shapiro and Stiglitz (1984)) is stronger if firing is more likely. Third, a cost of greater autonomy – a key element of employee satisfaction – is that workers may abuse it by slacking, which is alleviated by the firm’s ability to fire shirkers. Fourth, the value of autonomy is reduced by collective bargaining (a feature of rigid labor markets) because workers’ tasks are decided centrally, giving less freedom for a satisfied worker to voluntarily take value-creating actions.² Fifth, where dismissal laws are weak, employees may be less willing to innovate, because the firm may punish failure or hold up workers in the case of success (Acharya, Baghai, and Subrahmanian (2013)). Thus, a reputation for treating workers fairly and tolerating failure is particularly likely to spur innovation. Finally, in flexible labor markets, workers are better matched to jobs for which their skills are suited (Acemoglu and Pischke (1998)), and so increased motivation has a greater effect.

Testing the link between employee satisfaction and firm value is challenging, because causality may run from the latter to the former. Edmans (2011, 2012) partially addresses this challenge by using stock returns (rather than, say, profits) as the dependent variable. If satisfaction were the result, rather than cause, of high profits, these profits should already be incorporated into the stock price at the start of the return compounding window, since they are tangible (controlling for momentum to address any slowness in incorporation.) Thus, firms with high employee satisfaction should not outperform going forwards.³ In contrast, he finds that the “100 Best Companies to Work For in America” subsequently beat their peers by 2.3-3.8% per year over a 28-year period. These results suggest that employee satisfaction has value but is not immediately capitalized by the market. However, these papers only study the US – a country with particularly flexible labor

² Hypothetically, a satisfied employee could choose to exert effort in excess of the centrally bargained standard. However, a large literature on alienation of “rate-busters” highlights the social costs of doing so (e.g. Roethlisberger and Dickson (1939), Mayo (1949)).

³ A separate advantage is that stock returns capture all the channels through which satisfaction may improve firm value – in addition to profits, satisfaction may also lead to new products or contracts.

markets – and so their external validity is limited. It is unclear whether these results are generalizable to other countries, especially those with less flexible labor markets.

This paper addresses this open question. We study the link between employee satisfaction and stock returns in 30 countries, and how this link depends on a country's labor market flexibility. The US Best Companies (“BC”) list is produced by the Great Place to Work[®] Institute, which compiles similar lists in 44 other countries – 34 of which have at least one BC publicly traded in the domestic market. We measure country-level labor market flexibility using two versions of the OECD Employment Protection Legislation (“EPL”) index, which is available for 30 out of the 34 countries. The index is also used in Blanchard and Portugal (2000), Messina and Vallanti (2007), Pagano and Volpin (2005b), and Simintzi, Vig, and Volpin (2015).

We find that the alphas previously documented for the US are not anomalous in a global context. An equal-weighted BC portfolio generates a significant Carhart (1997) 4-factor monthly alpha of 29 basis points in the US. This alpha is only the 13th highest out of the 18 countries with at least ten publicly-traded domestic BCs. However, we also document sizable heterogeneity. For example, Germany exhibits an insignificantly negative alpha of -0.2%. Thus, prior results do not automatically extend to every country.

We next show that the abnormal returns to the BCs are higher in flexible labor markets, using two different weightings of the EPL index. We conduct a pooled panel regression of firm-level stock returns on BC status interacted with labor market flexibility, controlling for the firm-level determinants of stock returns identified by Brennan, Chordia, and Subrahmanyam (1998). To ensure that labor market flexibility is not simply proxying for other differences between countries, we control for country fixed effects and other country-level variables, both independently and interacted with BC status. Examples include price efficiency (Fernandes and Ferreira (2009)), GDP per capita, and the ratio of stock market capitalization to GDP (proxies for stock market development), since abnormal returns to depend not only on the value of satisfaction but also the extent to which it is not priced by the market.

We find that a one standard deviation increase in labor market flexibility is associated with a 0.30-0.34% higher industry-adjusted monthly return to being a BC, significant at the 1% level. The result suggests that the link between employee satisfaction and stock

returns depends critically on the institutional context. This has important implications for both managers and investors. Starting with the former, even if the Edmans (2011, 2012) results can be interpreted as causal, they do not suggest that managers should necessarily increase expenditure on employee satisfaction in countries with low labor market flexibility. Moving to the latter, investors can only expect to earn alpha from investing in firms with high employee satisfaction in countries with flexible labor markets.

However, our stock return results admit alternative explanations. First, the high stock returns of BCs in flexible labor markets could represent compensation for an omitted risk factor, perhaps because employee satisfaction is worth little upon bankruptcy. Second, it could be that employee satisfaction has zero value, but the market erroneously believes that it represents wasteful expenditure and thus discounts BCs upon list inclusion; the positive future returns represent an unwinding of this undervaluation. Both explanations seem difficult to reconcile with the negative excess returns in certain countries, and the variation of returns with labor market flexibility, but we can conduct additional tests to investigate them. If the superior returns to BCs in flexible labor markets stem from an initial discount – either due to risk or a misperception that employee satisfaction is wasteful – then the BCs should initially trade at low valuation ratios. In contrast, we show that, at the start of the return compounding window, they enjoy superior industry-adjusted Tobin's Qs, and this premium is significantly increasing in labor market flexibility. These results are consistent the market at least partially impounding the (positive or negative) value of employee satisfaction upon list publication.

To test the main hypothesis that employee satisfaction has value that the market misprices, we study future accounting performance. We find that the BCs earn higher future profitability than their peers, particularly in flexible labor markets. A one standard deviation increase in labor market flexibility is associated with BCs having a 0.74-0.76 percentage point higher return on assets the next year. We find similar results for return on assets two years out, and the net profit margin and sales growth over both a one- and two-year horizon.

In addition, superior future accounting performance should only manifest in higher stock returns if it was unanticipated by the market. We find that the BCs exhibit significantly higher earnings surprises than peer firms in flexible but not rigid labor markets.

A one standard deviation increase in labor market flexibility is associated the BCs enjoying a 0.31%-0.34% (0.34%-0.37%) higher earnings surprise one year (two years) ahead, significant at the 5% level.

Finally, the recruitment, retention, and motivational benefits of employee satisfaction should be stronger for industries with greater labor mobility. We find that the positive returns to employee satisfaction in flexible labor markets are even more pronounced for industries where labor is more mobile. A one standard deviation increase in labor market flexibility is associated with a 0.40% (0.36%) higher raw (market- or industry-adjusted) return per month to being a BC in the top 15 industries by labor mobility, as defined by Donangelo (2014), compared to being a BC in other industries.

This paper contributes to a number of literatures. The first is the link between employee satisfaction and various measures of firm performance, e.g. Abowd (1989), Diltz (1995), Dhrymes (1998), and Edmans (2011, 2012). These studies only analyze the US and may not generalize. Second, while an established literature highlights the importance of CEOs, a newer literature suggests that rank-and-file employees affect firm value (Kim and Ouimet (2014)), operating performance (Hochberg and Lindsey (2010)), and M&A success (Ouimet and Zarutskie (2020), Tate and Yang (2016)). Third, since employee satisfaction is a common socially responsible investing (“SRI”) screen, this paper contributes to research on the link between SRI and investor returns. This literature has mixed results and typically use US data.⁴ The value of various social screens – employee satisfaction, gender diversity, animal rights, environmental protection, and whether the firm is in a “sin” industry (such as tobacco, alcohol, and gambling) – likely depends on the institutional context and cultural norms. To our knowledge, this is the first paper to study the investment performance of a SRI screen in a global context.⁵ Finally, we add to the literature comparing the performance of investment strategies across countries. A more individualist national culture is associated with a stronger momentum anomaly (Chui,

⁴ Hamilton, Jo and Statman (1993), Bauer, Koedijk, and Otten (2005), Schröder (2007), and Statman and Glushkov (2009) find no or a mixed effect of SRI screens on investment returns; Brammer, Brooks, and Pavelin (2006), Renneboog, Ter Horst, and Zhang (2008), Hong and Kacperczyk (2009), Mueller, Ouimet, and Simintzi (2017), and Bolton and Kacperczyk (2020a) find a negative effect; Derwall et al. (2005), Fornell et al. (2006), Edmans (2011, 2012), Eccles, Ioannou, and Serafeim (2014), and Khan, Serafeim, and Yoon (2016) find a positive one; and Lins, Servaes, and Tamayo (2017) find a positive one only during crises.

⁵ A subsequent paper by Bolton and Kacperczyk (2020b) also studies the global performance of an SRI screen, although one that is negatively linked to long-term stock returns.

Titman, and Wei (2010)) and distress anomaly (Gao, Parsons, and Shen (2017)). Asness, Moskowitz, and Pedersen (2013) study the profitability of momentum and value strategies around the world.

1. Hypothesis development

We first discuss whether we should expect any long-run returns to the Best Companies lists at all, in either direction. Our return compounding window starts at the beginning of the month after list publication. Thus, since these lists are public, we should find no abnormal returns in a semi-strong efficient market. Regardless of the institutional context, and thus regardless of whether employee satisfaction has positive or negative value, this value should already be capitalized by the market.

However, there is significant prior evidence that intangible assets are not fully priced by the stock market. Firms with superior governance (Gompers, Ishii, and Metrick (2003), Giroud and Mueller (2011)), customer satisfaction (Fornell et al. (2006)), environmental efficiency (Derwall et al. (2005)), and high R&D and advertising expenditure (Chan, Lakonishok, and Sougiannis (2001)) all earn higher long-run returns. Edmans (2011) documents that the value of BC list inclusion is not fully capitalized by the market until 4-5 years later in the US, which is arguably the most efficient stock market. Thus, it is reasonable to hypothesize that the value of employee satisfaction will not be immediately capitalized by non-US stock markets. The magnitudes of the abnormal returns to other intangible-based portfolios found by prior work range from 4-8.5% per year, and so the mispricings found in this paper are plausible given these findings.

As explained in the introduction, the use of future stock returns as the dependent variable alleviates concerns that there is reverse causality from firm value to satisfaction. However, reverse causality can still arise if employees have superior information about their firm's future stock returns and those with positive information report higher satisfaction today. This explanation is unlikely for a number of reasons. Existing studies suggest that employees do not have private information: Benartzi (2001) shows that employees make incorrect decisions when investing in company stock, and Bergman and Jenter (2007) find that firms are able to lower total compensation by granting their workers overvalued options in lieu of salary. Even if employees do have superior information, it

is likely to be about near-term returns, given that executives are unable to forecast returns past 100 days (Jenter, Lewellen, and Warner (2011)). There is a significant time lag between the survey completion deadline and the start of the return compounding window – for example, this lag is seven months in the United States. Moreover, it is not clear why employees’ ability to forecast future returns would depend on labor market flexibility. Indeed, finding that the returns to employee satisfaction vary with country-level labor market flexibility would not only be interesting in its own right, but also reduce the likelihood that the original US results were due to reverse causality.

We now discuss why the value of employee satisfaction might depend on a country’s labor market flexibility. A key branch of the human resource management (e.g. Huselid (1995), Macduffie (1995)) and organizational economics (e.g. Milgrom and Roberts (1995)) literatures, known as contingency theory, emphasizes that the value of investing in employee satisfaction is highly contingent on the setting. Specifically, the introduction gave several reasons for why the recruitment, retention, and motivation benefits of employee satisfaction may be higher in more flexible labor markets. These same reasons imply that these benefits are lower in rigid labor markets, causing a downward shift in the marginal benefit curve, potentially into negative territory. Moreover, rigid labor markets may also entail a downward movement along the marginal benefit curve. When regulations already ensure that the average firm is offering a certain level of wages, job security, and employee representation, companies with high satisfaction relative to their peers may be in negative territory.⁶

Indeed, a manager may spend excessively on employee satisfaction due to an agency problem. He may enjoy more pleasant relationships with his workers by overpaying them (Jensen and Meckling (1976)), or use employee benefits as a takeover defense (Pagano and Volpin (2005a)). Indeed, Simintzi, Vig, and Volpin (2015) find that employment protection increases labor costs and reduces profitability. Cronqvist et al. (2009) show that high worker pay is correlated with managerial entrenchment. Excessive expenditure

⁶ Prior to 2015, US supermarket Costco paid its rank-and-file employees nearly double that of its close competitor Walmart, contributing to its high level of employee satisfaction. Due to the US’s flexible labor markets and thus relatively low minimum wage, many Walmart employees were low-paid and so Costco was able to offer a wage premium without exceeding employees’ marginal product; indeed, its profit per employee was over 40% higher than Walmart’s. Source: “Why Wal-Mart Will Never Pay Like Costco”, *Bloomberg*, August 27, 2013.

on employee satisfaction may also result from labor control. In countries where employees have more bargaining power (e.g. there is centralized collective bargaining, a feature of rigid labor markets), it could be workers who are determining human resource policies, and so satisfaction could be excessive from shareholders' perspective. Indeed, Gorton and Schmid (2004) find that German firms where one-half of the supervisory board consists of employees trade at a 31% discount to firms with one-third worker representation. Faleye, Mehrotra, and Morck (2006) find that labor-controlled US firms deviate more from value maximization and exhibit lower labor and total factor productivity. Chen, Kacperczyk, and Ortiz-Molina (2011) show that trade unions increase a firm's operating leverage and cost of equity, and Lee and Mas (2012) find that they reduce firm value by an average of \$40,500 per unionized employee.

2. Data and summary statistics

2.1. Measures of employee satisfaction

Our main data source is the Best Companies lists compiled by the Great Place to Work[®] Institute. The first list focused on US companies and was published in a 1984 book entitled the "The 100 Best Companies to Work for in America", later updated in 1993; from 1998 onwards it has been published every January in *Fortune* magazine. Two-thirds of the score comes from a 58-question survey that the Institute administers to 250 employees randomly selected in each firm. The remaining one-third comes from the Institute's evaluation of factors such as a company's demographic makeup, pay and benefits programs, and culture. The companies are scored in four areas: Credibility (communication to employees), Respect (opportunities and benefits), Fairness (compensation and diversity), and Pride/Camaraderie (teamwork, philanthropy, and celebrations), and the top firms are publicly announced in a list. The list is highly regarded as a thorough measure of employee satisfaction, receiving significant attention from shareholders, management, employees, and the media, and has since been extended to 44 other countries around the world.

The recruitment, retention, and motivation benefits of *aggregate* employee satisfaction likely depend on labor market flexibility, as discussed in the introduction. Moreover, the benefits of *specific* dimensions of employee satisfaction captured in the survey also likely

depend on labor market flexibility – in other words, the survey questions reflect the dimensions of satisfaction that are relevant for our hypothesized mechanisms. Certain survey dimensions may already be mandated by law, and thus would not be seen as a “gift” under Akerlof’s (1982) model. For example, the Credibility area contains questions on informative communication (“management keeps me informed about important issues and changes”, “management makes its expectations clear”) and accessible communication (“I can ask management any reasonable question and get a straight answer”, “management is approachable, easy to talk with”); the Respect area contains questions on collaboration (“management genuinely seeks and responds to suggestions and ideas”, “management involves people in decisions that affect their jobs or work environment”). These dimensions would likely already be satisfied for the average firm in Germany, where worker representation on the board is mandatory and so there is little additional value from being above average. The Respect area also contains questions on work environment, and the Fairness area contains questions on discrimination, both of which may also be mandated by law.

A second dimension discussed in our hypothesis development is autonomy, which is captured by many areas. For example, the Respect area contains questions such as “management genuinely seeks and responds to suggestions and ideas”, “management involves people in decisions that affect their jobs or work environment”, “I am able to take time off from work when I think it’s necessary”, and “people are encouraged to balance their work life and their personal life.” A third dimension is that, where firing is easier, employees may innovate less due to fear of firing either if the innovation fails or if it succeeds (due to expropriation). The Credibility area contains questions on reliability (“I believe management would lay people off only as a last resort”) and honesty (“Management is honest and ethical in its business practices”); the Respect area contains a question on tolerance for failure (“Management recognizes honest mistakes as part of doing business”).

Note also that most of the dimensions of employee satisfaction captured by the survey are cultural, and thus cannot be easily improved (e.g. by firms spending more money). Thus, even if executives were aware of the link between employee satisfaction and future stock returns, and even if the link were causal, they may be unable to exploit it since

employee satisfaction – like many other intangible assets (such as a firm’s brand strength, customer loyalty, or innovative capability) – cannot be easily increased. In addition, the stock market only *fully* incorporates the benefits of employee satisfaction in the long-term (Edmans (2011)), so even if executives were able to exploit any link, they may not have incentives to do so, given short-term stock price concerns.

Firms apply to be considered for the list. Such selection issues either have no effect or likely bias the results downwards. For it to affect the results, the selection decision must be correlated with either the independent variable (satisfaction) or outcome variable (future returns). If firms with low satisfaction choose not to apply because they expect not to make the list, this simply increases its accuracy. If a firm with high satisfaction chooses not to apply because it believes this quality is already publicly known, this reduces the satisfaction level of the firms in the list and attenuates the results. Turning to the outcome variable, even if the decision to apply were correlated with current profitability or past stock returns, both variables should be incorporated into the stock price at the start of the return compounding window and thus not affect future stock returns (controlling for momentum). Even if management has temporary private information on future returns, this likely has little effect since list applications must be made by several months before the return window (e.g. 8 months⁷ for the US). As discussed previously, Jenter, Lewellen, and Warner (2011) show that managers’ private information is confined to the next 100 days. Moreover, it is not clear why selection issues would lead to the returns to BCs being linked to labor market flexibility.

We include countries with more than five years’ history of BC listings. For each country, we only include BCs that are both headquartered and primarily listed in that country, to prevent the results being driven by a small number of multinational firms that are on the BC list of several countries. Table 1 describes the 30 countries with data on labor market flexibility (which we will describe in Section 2.2) and where at least one BC is headquartered and listed. Column (1) shows the start year of BC listings for each country. Since the earliest start year for a non-US country is 1997 (for Brazil), our sample

⁷ This contrasts with the 7-month window between employee survey responses and the return window since employees have one month to fill in the survey.

period is from September 1997 to December 2017. As a result, we start the US data from 1998 when the lists were first published in *Fortune*.

To form BC portfolios, we use the beginning of the month after the list publication date for each country as our portfolio formation date. For example, the US list is typically published in mid-January, and so we use February 1 as the portfolio formation date. Thus, our analyses jointly test whether employee satisfaction has value and this value is not immediately capitalized by the market. The constituents of BC portfolios are rebalanced once a year on the same day. Column (2) reports the portfolio formation dates for each country. Column (3) gives the number of publicly listed BCs per country. Our sample covers 643 public BCs for across countries.

For the UK and US, the number of firms in the list has remained constant over time. For the other countries, it has increased over time – for example, the first list in Germany (in 2003) contains 50 firms, while in 2017 it contains 100. Columns (6) and (7) of Table 1 indicates the number of BCs selected in the initial list and the 2017 list for each country.

Just as the US list has been published in *Fortune* every year since 1998, the BC lists in other countries have similarly been widely publicized, and so an efficient market should rapidly incorporate them into the stock price. Column (8) lists the current publisher for the list in each country; each is a major newspaper or magazine.⁸

2.2. Measures of labor market flexibility

We use the EPL index to measure labor market flexibility. The index measures the procedures involved in hiring workers on either fixed-term or temporary contracts, and in dismissing individuals and groups of workers. It is based on statutory laws, collective bargaining agreements, case law, contributions from OECD member countries, and experts' advice from each country. It has three components:

Individual dismissal of workers with regular contracts (category EPR) measures three aspects of dismissal protection: (i) procedural inconveniences of the dismissal process faced by employers, such as notification and consultation requirements; (ii) length of notice periods and conditions of severance pay; and (iii) difficulty of dismissal, such as the

⁸ In some cases, the publisher has changed over time, or there is more than one outlet; we report the current publisher, and the main outlet in the case of multiple ones.

circumstances under which a dismissal is possible, and repercussions for the employer if an unfair dismissal is discovered.

Additional costs for collective dismissals (category EPC) measures the extra costs faced by employers when they dismiss several workers simultaneously, over and above the costs applicable for individual dismissals.

Regulation of temporary contracts (category EPT) measures regulations for fixed-term and temporary work contracts in terms of job type and duration, requirements for such workers to receive equal pay and working conditions as permanent employees, and regulations for the setup and operations of work agencies.

The first two measures capture the ease of dismissal. As mentioned in the introduction, fewer firing constraints increase the motivational benefits of employee satisfaction (as workers will exert greater effort to avoid being fired from a satisfying job), and its recruitment benefits (since the ease of firing raises the number of vacancies). The third measure captures constraints on hiring, which reduce the recruitment and retention benefits of satisfaction. Separately, regulations on hiring and firing mean that the average firm already exhibits a certain level of satisfaction, and so an above-average firm may be exceeding the optimal level.

We use two versions of the EPL measure. The first version, denoted as *EPL1*, is based on an equally-weighted average of the three components. The motivation for the second version, *EPL2*, is that the OECD website not only reports the three above components, but also a composite measure of EPR and EPC (which they call “employment protection of regular contracts” (EPRC) which gives a weight of 5/7 to EPR and 2/7 to EPC, implying that it believes that EPR is 2.5 times as important as EPC. To calculate *EPL2*, we thus assign a 1/3 weight to temporary contracts (EPT), as in *EPL1*, and a 2/3 weight to EPRC, which we then sub-weight with 5/7 on EPR and 2/7 on EPC. Therefore, our weights for *EPL2* are 10/21 on EPR, 4/21 on EPC, and 7/21 on EPT. For both measures, we subtract the simple or weighted average from 10, so that a higher EPL score indicates high labor market flexibility.

Panel B of Table 1 reports the time series mean of the two EPL measures and each sub-index for each country from 1997-2017.⁹ As a rough check that EPL is linked to labor turnover, we were able to collect data on labor turnover rates for seven countries in our sample from OECD (1996). Their correlation with the time series mean of *EPLI* in our sample period is 0.73. Similarly, Messina and Vallanti (2007) and the OECD (2013) show that EPL is negatively associated with labor turnover.

We obtain stock return and accounting data from CSRP/Compustat for US firms, and from Datastream for non-US firms. We construct our sample of firm-month observations as follows. For firms incorporated in the US, we keep only common stocks defined by CRSP/Compustat, i.e. with share code SHRC=10 or 11. For non-US firms, we keep only primary, major equities traded on domestic stock exchanges as defined by Datastream. We include both active and inactive firms to avoid survivorship bias, but drop an observation if either its raw stock return or any of the eight firm controls described in Section 3.2 are missing.¹⁰ We also drop observations where the Datastream total return index is less than 3 to avoid the effects of rounding errors, following Guo and Savickas (2008).¹¹ Unless otherwise stated, we then winsorize all dependent and independent variables at the 0.1% level in each tail.¹² We include firms into the sample after the start year of BC listings for their country. Column (5) ((6)) of Table 1 reports the total number of publicly listed firms (firm-month observations) including BCs per country. Our final sample consists of 2,741,282 firm-month observations for 34,877 publicly listed firms.

In Table 2, Panel A presents summary statistics for firm-level stock returns and controls, and Panel B does so for the seven country-level controls. Panel C exhibits the Pearson pairwise correlation coefficients between the country-level control and our two labor market flexibility measures. All variables are described in Appendix A.

⁹ The OECD reports EPL data until 2013 for OECD countries, and sometimes for a sub-period only for emerging markets countries such as Brazil and India. We use the first available value to fill in missing EPL values for years prior to it and the last available value to fill in missing values for years after it.

¹⁰ We also dropped 5 BCs that were acquired during our sample period to exclude high returns caused by the takeover premium (rather than employee satisfaction being high or low).

¹¹ As the beginning RI for each stock is set at 100 by Datastream, an RI of 3 or below indicates that the firm has lost 97% or more of its value over its life. Given that Datastream rounds off the total return index (Datastream variable RI) to the nearest tenth, it could introduce substantial measurement errors for returns of low RI stocks. Therefore, if the return index of a stock is below three in a day or month, we set the corresponding return to a missing value.

¹² Results are similar with winsorization at either 0.5% or 1% in each tail.

3. Results

3.1. Country-level alphas

We first calculate the Carhart (1997) four-factor alphas to the BC portfolios in each country:

$$R_{ct} = \alpha + \beta_{MKT}MKT_{ct} + \beta_{HML}HML_{ct} + \beta_{SMB}SMB_{ct} + \beta_{MOM}MOM_{ct} + \varepsilon_{ct}, \quad (1)$$

where R_{ct} is the US dollar returns to a BC portfolio (either equal-weighted or value-weighted) in month t for country c in excess of the US one-month treasury rate (as in Fama and French (2012)). We use dollar returns, consistent with the literature on international asset pricing (e.g. Fama and French (2017) and Griffin (2002)) and also because the Fama and French (2012) factors, described shortly, are in dollars. Since some country portfolios have few stocks, in this section we winsorize returns at the 1% level to reduce the effect of outliers.

α is an intercept that captures the abnormal risk-adjusted return. MKT , HML , SMB , and MOM are, respectively, the Fama and French (2012) regional factors on market, value, size, and momentum, collected from Ken French's website.¹³

ε is an error term. Standard errors are corrected for heteroscedasticity and autocorrelation using Newey-West's (1987) estimator with four lags. As portfolio returns with a very small number of stocks can give noisy estimates, we run the country-level alpha regressions only for countries with at least ten publicly-listed domestic BCs. Out of the 30 countries in our study, 18 countries satisfy the above criterion.

Table 3 reports results for both equal-weighted and value-weighted portfolios in these 18 countries; for brevity, we do not report the coefficients on the risk factors. For equal-weighted portfolios, Germany has an insignificantly negative alpha. The remaining 17 countries have positive alphas, which are significant at the 10% level or better for Finland, India, Japan, Peru, the UK, and the US. In terms of economic significance, the US has

¹³ We use the Europe factors for all European countries, the North American factors for Brazil, Canada, Chile, Columbia, Mexico, Peru, and the US, the Japan factors for Japan, and the Asia-Pacific Excluding Japan factors for Korea and India.

the 13th highest alpha out of the 18 countries, suggesting that it is not an outlier. For value-weighted portfolios, Germany, Greece, and Norway have insignificantly negative alphas. The alphas for Finland, India, Japan, and the UK are significantly positive at the 10% level or better.

Figure 1 plots the relationship between a country’s BC portfolio alpha and its labor market flexibility in the year before its first BC list. All four lines have a positive slope, suggesting that the returns to being a Best Company are increasing in labor market flexibility. To test for statistical significance, we run weighted-least squares regressions of country-level alphas on both EPL measures. We weight each country by the inverse of the squared standard error of its alpha estimate, since some countries have fewer observations and thus less precise alpha estimates. Panel B of Table 3 shows that, for value-weighted portfolios, the coefficients on both measures of EPL are statistically significant at the 1% level, and for equal-weighted portfolios the coefficient on *EPL1* (*EPL2*) is significant at 5% (10%).¹⁴

3.2. Characteristics controls

While Section 3.1 controls for the BCs’ covariance with risk factors, this section controls for firm characteristics that may also affect stock returns. We first run the following pooled panel regression across all firms (both BCs and non-BCs) within a country, at the firm-month level:

$$R_{it} = \beta_0 + \beta_1 BC_{it} + \beta_2 FirmControls_{it} + \varepsilon_{it}. \quad (2)$$

R_{it} is the return on stock i in month t . We use three different variables for the stock return. The first is the raw return. The second is the market-adjusted return in excess of the MSCI stock market index for each country, from Datastream.¹⁵ The third is the

¹⁴ As a robustness check, we also use Fama and French’s (2017) five-factor model, including the market, value, size, profitability, and investment factors. This specification is less appropriate since profitability is a “bad control” – a channel through which BC status may affect stock returns (as we show in Section 5). Nevertheless, results are significant at the 5% level in three specifications and insignificant only for equal-weighted portfolios under *EPL2* (see Appendix B).

¹⁵ Results are similar using the CAPM-adjusted abnormal return with either a 5- or 3-year rolling-window beta.

industry-adjusted return in excess of the median return among non-BC firms in the same industry and country as firm i in month t , using the Fama and French (1997) 48-industry classifications. BC_{it} is a dummy variable that equals one if firm i was included in the most recent BC list prior to month t , and zero otherwise. $FirmControls_{it}$ are the control variables used in Brennan, Chordia, and Subrahmanyam (1998), calculated using CRSP and Compustat for US firms and Datastream and Worldscope for non-US firms. $SIZE$ is the log of firm i 's market capitalization at the end of month $t-2$. BM is the log of firm i 's book-to-market ratio at the end of month $t-2$. YLD is firm i 's dividend yield: the total dividend paid over the 12 months prior to month t , divided by the share price at the end of month $t-2$. $RET2-3$ is the log of one plus firm i 's cumulative return over months $t-3$ through $t-2$. $RET4-6$ and $RET7-12$ are defined similarly. VOL is the log of firm i 's dollar trading volume in month $t-2$. PRC is the log of firm i 's price at the end of month $t-2$. We also include year-month fixed effects to control for macroeconomic conditions that may affect stock returns in a given month. Standard errors are clustered by year-month; clustering by firm does not change the results.

The results are presented in Table 4; we only present the coefficient on the BC dummy for brevity. For all three return measures, it is significantly positive for Australia, Brazil, Canada, India, Japan, and the US.¹⁶ For example, in the US, being a BC is associated with an additional industry-adjusted monthly return of 38 basis points. Argentina, Colombia, Denmark, Ireland, Italy, Netherlands, Saudi Arabia, Switzerland, and Turkey have negative coefficients on the BC dummy, although none is significant even at the 10% level.

4. The role of labor market flexibility

While Figure 1, Panel B and Table 3 showed that BC returns are related to labor market flexibility at the country level, Holderness (2016) stresses that international empirical analyses should be conducted at the firm level, as country-level analyses ignore firm characteristics. We thus conduct a firm-level analysis, linking a firm's stock returns to

¹⁶ The coefficients on the BC dummy in Australia and Canada are very high (e.g. respectively, 233 and 176 basis points for raw returns). We have re-run the cross-country analyses that follow excluding Australia and Canada for robustness. The results are very similar, since the Australia and Canada data is only available for a short time period.

its BC status interacted with labor market flexibility, plus firm characteristics previously shown to affect returns. To do so, we enhance the pooled panel regression in equation (2) with measures of labor market flexibility and country-level controls, and estimate it across the full sample of all countries using the following regression:

$$R_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls_{cit} + \varepsilon_{cit}. \quad (3)$$

where R_{cit} is either the raw, market-adjusted, or industry-adjusted return. EPL refers to either of our two labor market flexibility measures: $EPL1$ and $EPL2$. $CountryControls_{ct}$ is a vector of other country-level control variables. $RuleofLaw_c$ measures the rule of law from La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997). $GDPg_{ct}$ measures GDP growth taken from the World Bank, and $ADRI_c$ measures the anti-director rights index corrected by Spamann (2010). IDV_c is Hofstede's (1980) measure of a country's cultural individualism, which we include because Chui, Titman, and Wei (2010) and Gao, Parsons, and Shen (2017) find that profits to two other trading strategies (momentum and distress, respectively) depend on individualism. $PriceInf_{ct}$ is a measure of price informativeness based on Fernandes and Ferreira (2009): one minus the R-squared of a regression of monthly equity excess returns on value-weighted local market excess returns and US market excess returns each year. We take the median value over all firms for a particular country-year.¹⁷ Since the returns to BCs capture not only the value of employee satisfaction, but the extent to which this value is not immediately capitalized by the market, we include price informativeness as a proxy for market efficiency.¹⁸ We also include GDP_{ct} (GDP per capita) and $MktCapGDP_{ct}$ (stock market capitalization over GDP), both taken from the World Bank, which proxy for the development of a country's economy and stock market, and thus may also be related to market efficiency.

We include the country-level controls both independently (except for the time-invariant country-level variables $RuleofLaw$, $ADRI$ and IDV since we have country fixed effects) and

¹⁷ Following Fernandes and Ferreira (2009), we exclude firm-years with negative sales and total assets of under \$100 million, and require stock returns data in Datastream in every month of a given year.

¹⁸ Note that the control for firm size may also proxy for arbitrage costs and investor sophistication (Lakonishok, Shleifer, and Vishny (1994)).

also interacted with *BC*, to ensure that any significance of the *BC*EPL* interaction does not simply arise because *EPL* proxies for another country-level variable that is causing cross-country differences in the returns to the BCs. We include year-month fixed effects as in equation (2), and country fixed effects to capture country-level variation in average stock market returns. Following Petersen (2009), we double-cluster standard errors. We do so at the country and year-month levels as it is the most conservative specification; the results remain robust to double-clustering at the firm and year-month levels.

While we include country fixed effects and time-varying country controls (both independently and interacted with *BC*), it may be that *EPL* is correlated with time-varying unobservable country-level factors that are captured by neither our observable controls nor time-invariant fixed effects. To explain our results, not only would the unobservable factors have to be associated with future stock returns, but also the association would have to depend on a firm's BC status. While not impossible, this narrows the range of admissible alternative explanations for our findings.¹⁹

Panel A of Table 5 presents the results using *EPLI* as the measure of labor market flexibility. Columns (1)-(3) use raw returns as the dependent variable. In column (1), which contains no measures of labor market flexibility or country controls, *BC* has a positive coefficient of 0.61, which is significant at the 1% level. However, in column (3) when interactions with *EPL* and the country controls are added, the coefficient on *BC* becomes significantly negative, but the coefficient on *BC*EPL* is significantly positive at the 5% level. Thus, BCs are not associated with higher returns on average, but only in countries with flexible labor markets. Columns (4)-(6) ((7)-(9)) use the market-adjusted (industry-adjusted) return as the dependent variable. The results are equally strong, with the coefficient on *BC*EPL* being 0.54 (0.51) for market-adjusted (industry-adjusted) returns. A one standard deviation increase in *EPL* is associated with a 0.36% (0.34%) increase in the monthly market-adjusted (industry-adjusted) return to being a BC.

¹⁹ We were unable to find (from either prior literature or institutional study) any exogenous shocks to labor laws during our sample period that we could exploit for identification. The OECD (2013, Figure 2.1) documents changes in *EPL*, but only Greece and Brazil experience large changes in our sample period. In addition, such changes are themselves likely to be endogenous, since countries choose when to enforce labor laws.

Panel B presents the results using *EPL2* as the measure of labor market flexibility, which are similar to Panel A. For raw, market-adjusted, and industry-adjusted returns in columns (3), (6), and (9) respectively, the coefficient on *BC*EPL* is positive and significant at the 5% level or better. For example, the coefficient of 0.44 in column (9) indicates that a one standard deviation increase in *EPL2* is associated with a 0.30% increase in the monthly industry-adjusted return to being a BC.

5. Potential mechanisms

The results of Section 4 are consistent with a number of potential mechanisms. Our hypothesis is that employee satisfaction has particularly high value in flexible labor markets, but the market does not fully incorporate this value immediately upon list publication. However, there are a number of alternative explanations. First, the abnormal returns stem from risk rather than mispricing – since employee satisfaction is an intangible asset worth little in bankruptcy, the BCs may be particularly vulnerable to changes in economic conditions. It is unclear why an omitted risk factor would vary with labor market flexibility, but additional analyses can be conducted to assess this hypothesis. Second, employee satisfaction creates neither positive nor negative value, but the market erroneously thinks that it represents wasteful expenditure, and so reacts negatively to list inclusion; the subsequent superior returns reflect the correction of this mispricing. This explanation would require the negative returns to employee satisfaction in other countries to result from the market erroneously thinking that it is value-creating and incorrectly reacting positively to list inclusion.²⁰

Both of these alternative hypotheses would imply that the BCs in flexible (rigid) labor markets trade at a valuation discount (premium) at the beginning of the return compounding window, i.e. at the start of the month following list publication. We thus study the relationship between BC status and industry-adjusted Tobin's Q by running the following regression:

²⁰ A third channel is that list inclusion itself attracts demand from socially responsible investors, leading to price pressure. Edmans (2011) estimates this effect for the US and found it to be very small compared to the magnitude of the abnormal returns. In addition, this channel would require the increased demand from socially responsible investors to depend on labor market flexibility.

$$Q_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls2_{cit} + \varepsilon_{cit}. \quad (4)$$

Q_{cit} is industry-adjusted Tobin's Q for firm i in country c in year t at the start of the return compounding window, where Tobin's Q is calculated as the sum of book assets plus market equity, minus the sum of book equity plus balance sheet deferred taxes, all divided by book assets. $FirmControls2$ is a vector of firm controls: $Book$ is the log of book assets, ROE is firm i 's return on equity as measured by income divided by book equity, and $FROE$, $F2ROE$, and $F3ROE$ represent the return on equity for the next three years. The choice of these variables follows Gompers, Ishii, and Metrick (2003) and Edmans (2011). Also as in Gompers, Ishii, and Metrick (2003), we run least absolute deviation regressions to mitigate the effect of large outliers. The country-level controls are defined as in Table 4. We include country and year-month fixed effects, and standard errors are robust to heteroscedasticity and misspecification (Angrist, Chernozhukov, and Fernández-Val (2006)), and clustered at the country level.²¹

The results in Table 6 show that, without country controls or EPL , the BCs enjoy Tobin's Qs that are 0.54 units higher at the start of the return compounding window; the magnitude is consistent with Edmans (2011) for the US. Moreover, this premium is particularly high in flexible labor markets. When the $BC \times EPL$ interactions are included, they are significant at the 1% level (both with and without country controls), but the coefficient on BC as a standalone becomes significantly negative, suggesting that the BCs are *only* associated with higher Q in flexible labor markets. With country fixed effects and country controls, a one standard deviation increase in both EPS measures is associated with BCs having a 0.11 unit higher Q. These results are inconsistent with the alternative explanation that the superior returns to the BCs in flexible labor markets result from them initially trading at a discount. In contrast, they are consistent with the hypothesis that employee satisfaction is valuable, particularly in flexible labor markets, and the market partially incorporates its value upon list publication.

²¹ The fixed effects are at the year-month (rather than year) level, because the month following list publication differs across countries.

We now study the future accounting performance of the BCs, to investigate whether their excess returns result from the (positive or negative) value of employee satisfaction rather than risk. We run the following regression:

$$Perf_{cit+j} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 BM_{cit} + \delta_4 Perf_{cit} + \varepsilon_{cit}. \quad (5)$$

$Perf_{cit+j}$ is industry-adjusted accounting performance for firm i in country c in year $t+j$ (for $j \in \{1, 2\}$), measured in three ways. ROA_{cit+j} is the industry-adjusted return on assets, calculated as operating income before depreciation divided by book value of assets following Chan and Chen (1991).²² NPM_{cit+j} is the industry-adjusted net profit margin, calculated as operating income before depreciation divided by sales following Jacobson (1987). SGR_{cit+j} is the one-year sales growth rate. Following Gompers, Ishii, and Metrick (2003), we include BM_{cit} as a firm-level control. We also add $Perf_{cit}$, current operating performance, to control for potential persistence. The country-level controls are defined as in Section 4. We include country and year-month fixed effects. Standard errors are robust to heteroscedasticity and misspecification (Angrist, Chernozhukov, and Fernández-Val (2006)), and clustered at the country level.²³

The results are shown in Table 7. The BCs enjoy return on asset ratios that are 1.80 (1.49) percentage points higher than their peers one year (two years) after list inclusion.²⁴ When the $BC \times EPL$ interactions are added, they are significant at the 1% level in three specifications and 10% in the fourth; the coefficient on BC alone either becomes insignificant or significantly negative at 1% level. A one standard deviation increase in $EPL1$ ($EPL2$) is associated with BCs having a next-year return on assets that is 0.76 (0.74) percentage points higher. We find similar results using net profit margin or one-year sales growth rate as the dependent variable. The results based on $EPL2$ are similar (see

²² The results remain significant when replacing operating income before depreciation by net income.

²³ We use the Stata “qreg2” command that only allows clustering of standard errors along one dimension. To our knowledge, the econometrics literature has not proposed an estimator for two-way clustering in a quantile regression and no such code is available.

²⁴ As a benchmark against which to evaluate the economic significance of this result, if we take the inter-quartile range (standard deviation) of ROA for each country and calculate the median across the 30 countries, we obtain 5.64% (10.8%). Thus, the BCs’ 1.8% or 1.49% higher return on assets appear plausible.

Appendix C). Out of the 24 specifications (with and without controls, using *EPL1* or *EPL2*, for *ROA*, *NPM*, and *SGR* as the performance measure, and studying performance one or two years ahead), 16 of the *BC*EPL* interaction terms are significant at least at the 5% level, and five at the 10% level.

The superior operating performance of the BCs in flexible labor markets can only account for their superior stock returns to the extent that they are unanticipated by the market. Thus, Table 8 follows Core, Guay, and Rusticus (2006), Giroud and Mueller (2011), and Edmans (2011) by studying the earnings surprises of the BCs. We run the following pooled panel regression across countries:

$$\begin{aligned} Surprise_{cit} = & \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \\ & \delta_2 CountryControls_{ct} + \delta_3 FirmControls_{3cit} + \varepsilon_{cit}, \end{aligned} \quad (6)$$

where *Surprise* is the one or two-year earnings surprise. The one-year earnings surprise is the actual earnings per share for the fiscal year ending in year *t* minus the median I/B/E/S analyst forecast, deflated by the stock price two months prior. The I/B/E/S consensus forecast is taken eight months prior to the end of the forecast period, i.e. four months after the previous fiscal year-end. Since most annual reports are filed within three months of the fiscal year-end, this ensures that analysts know prior earnings when making their forecasts. The two-year earnings surprise is calculated in a similar fashion, with the consensus forecast taken 20 months before the year-end. As in Easterwood and Nutt (1999), Giroud and Mueller (2011), and Edmans (2011), we remove observations for which the forecast error is larger than 10% of the price. *FirmControls3* is a vector of control variables. Columns (1) and (4) include no firm controls; (2) and (5) include *BM* one and two years prior, and (3) and (6) also include *SIZE* one and two years prior. All specifications include country and year-month fixed effects.

Our hypothesis is not only that the BCs exhibit superior earnings surprises, but also that this superiority is increasing in labor market flexibility. This is a difficult test to pass: Core, Guay, and Rusticus (2006) show that, even though well-governed firms deliver higher stock returns than poorly-governed firms (Gompers, Ishii, and Metrick (2003)), they

do not deliver superior earnings surprises – even in unconditional regressions that do not interact the variable of interest (governance) with a country-level variable.

Table 8 illustrates the results using *EPL1* as the measure of labor market flexibility. Columns (1)-(3) show that the BCs enjoy significantly higher one-year earnings surprises in flexible labor markets: the coefficient on *BC*EPL* is significant at the 1% level. Column (1) contains no firm control while columns (2) includes *BM* and column (3) also adds *SIZE*. Columns (4)-(6) study two-year earnings surprises and show that the interaction is significant at at least the 5% level in all columns. In terms of economic significance, a one standard deviation increase in the EPL measure is associated with a 0.34% (0.37%) increase in the one-year (two-year) earnings surprise. Appendix D shows similar results using *EPL2*.

In our final set of tests, we examine whether the relationship between employee satisfaction and stock returns in flexible labor markets depends on industry labor mobility. In particular, the recruitment, retention, and motivational benefits of employee satisfaction in flexible labor markets are likely stronger for industries with greater labor mobility. Therefore, we triple-interact the BC dummy, EPL, and industry labor mobility while controlling for all double-interactions between the three variables:

$$R_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times EPL_{ct} \times LM_i + \beta_4 BC_{cit} \times LM_i + \beta_5 EPL_{ct} \times LM_i + \beta_6 LM_i + \beta_7 EPL_{ct} + \delta_1 BC_{cit} \times CountryControls_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls_{cit} + \varepsilon_{cit}. \quad (7)$$

where *LM_i* is a dummy variable that equals one if firm *i* is in the top 15 industries by labor mobility (based on two-digit SIC codes manually matched with the four-digit NAICS industries) categorized by Donangelo (2014), who reports the top 15 and bottom 15 industries, and zero otherwise.

Table 9 shows that the positive returns to employee satisfaction in flexible labor markets are even more pronounced for industries where labor is more mobile. Based on the coefficients on *BC*EPL*LM*, a one standard deviation increase in labor market flexibility is associated with a 0.40% (0.36%) higher raw (market- or industry-adjusted) return per month to being a BC in the top for 15 industries by labor mobility, compared to

being a BC in other industries. The results based on *EPL2* remain positive but are insignificant (see Appendix E).

Overall, our results suggest that companies with high employee satisfaction exhibit higher future stock returns, current valuation ratios, future operating performance, and earnings surprises, particularly in countries with high labor market flexibility. These findings are consistent with employee satisfaction being a valuable intangible asset that is not fully priced by the market in countries with flexible labor markets, but having less value in countries with rigid labor markets.

6. Conclusions

This paper studies how the relationship between employee satisfaction and stock returns depends critically on a country's labor market flexibility. The alphas documented by Edmans (2011, 2012) for the US are not anomalous in a global context, in terms of economic significance. However, they do not automatically generalize to every country – the returns to being listed as a Best Company to Work For are increasing in labor market flexibility. We find similar results for current valuation ratios, operating performance, and future earnings surprises.

Our findings are consistent with the recruitment, retention, and motivational benefits of employee satisfaction being most valuable in flexible labor markets. The results emphasize the importance of the institutional context for both managers and investors. Even if prior results using US data can be interpreted as causal, it is not the case that managers can hope to increase stock returns by investing in employee satisfaction, because a positive link only exists in countries with high labor market flexibility. Turning to investors, a strategy of investing in firms with high employee satisfaction will only generate superior returns in countries with high labor market flexibility. This conclusion holds regardless of whether the link between employee satisfaction and stock returns is causal, or whether employee satisfaction is a proxy for other sources of underpricing – whatever investment signal is captured in employee satisfaction, the value of this signal depend on labor market flexibility.

Given that the vast majority of empirical asset pricing studies that uncover alpha are based on US data, the results emphasize caution in applying these strategies overseas.

This caution is especially warranted for strategies that are likely to be dependent on the institutional or cultural environment, such as socially responsible investing. Just as the value of employee satisfaction depends on the flexibility of labor markets and existing regulations on worker welfare, the value of other SRI screens, such as gender diversity, animal rights, environmental protection, and operating in an ethical industry, also likely depend on the context.

This caution is particularly important because practitioners typically misportray the academic evidence on SRI, giving the impression that it is unambiguously positive. For example, BlackRock CEO Larry Fink’s 2020 letter to CEOs states that “sustainability and climate integrated portfolios can provide better risk-adjusted returns to investors” and “a company’s prospects for growth are inextricable from its ability to operate sustainably and serve its full set of stakeholders”; Hargreaves Lansdown, the UK’s leading broker, claims that “study after study has shown that businesses with ESG (environmental, social and governance) characteristics have outperformed their peers”²⁵, and a *Financial Times* article claims that “the outperformance of ESG strategies is beyond doubt”.²⁶ As discussed in the introduction, academic research has documented that only certain SRI strategies outperform. This paper shows that even the few strategies that outperform in the US may not outperform globally, further emphasizing the dangers with portraying the academic evidence for SRI as being unequivocal.

²⁵ <https://www.hl.co.uk/features/sustainable-approaches-to-a-profitable-future>.

²⁶ “The Ethical Investment Boom”, September 3, 2017.

References

- Abowd, John M. (1989): “The Effect of Wage Bargains on the Stock Market Value of the Firm.” *American Economic Review* 79, 774–800.
- Acemoglu, Daron and Jörn-Steffen Pischke: (1998) “Why do Firms Train? Theory and Evidence.” *Quarterly Journal of Economics* 63, 79–119.
- Acharya, Viral V., Ramin P. Baghai, and Krishnamurthy V. Subrahmanian (2013): “Labor Laws and Innovation.” *Journal of Law and Economics* 56, 997–1037.
- Akerlof, George A. (1982): “Labor Contracts as Partial Gift Exchange.” *Quarterly Journal of Economics* 97, 543–569.
- Angrist, Joshua D., Victor Chernozhukov, and Iván Fernández-Val (2006): “Quantile Regression Under Misspecification, with an Application to the US Wage Structure.” *Econometrica* 74, 539–563.
- Asness, Clifford S., Tobias J. Moskowitz, and Lasse Heje Pedersen (2013): “Value and Momentum Everywhere.” *Journal of Finance* 68, 929–985.
- Bauer, Rob, Kees Koedijk, and Roger Otten (2005): “International Evidence on Ethical Mutual Fund Performance and Investment Style.” *Journal of Banking and Finance* 29, 1751–1767.
- Benartzi, Shlomo (2001): “Excessive Extrapolation and the Allocation of 401(k) Accounts to Company Stock.” *Journal of Finance* 56, 1747–1764.
- Bergman, Nittai and Dirk Jenter (2007): “Employee Sentiment and Stock Option Compensation.” *Journal of Financial Economics* 84, 667–712.
- Blanchard, Olivier and Pedro Portugal (2001): “What Hides Behind an Unemployment Rate: Comparing Portuguese and US Labor Markets.” *American Economic Review* 91, 187–207.
- Bolton, Patrick and Marcin T. Kacperczyk (2020a): “Do Investors Care About Carbon Risk?” Working Paper, Columbia University.
- Bolton, Patrick and Marcin T. Kacperczyk (2020b): “Carbon Premium Around the World” Working Paper, Columbia University.
- Brammer, Stephen, Chris Brooks, and Stephen Pavelin (2006): “Corporate Social Performance and Stock Returns: UK Evidence from Disaggregate Measures.” *Financial Management* 35, 97–116.

- Brennan, Michael J., Tarun Chordia, and Avanidhar Subrahmanyam (1998): “Alternative Factor Specifications, Security Characteristics, and the Cross-Section of Expected Returns.” *Journal of Financial Economics* 49, 345–373.
- Carhart, Mark M. (1997): “On Persistence in Mutual Fund Performance.” *Journal of Finance* 52, 57–82.
- Chan, K. C. and Nai-Fu Chen (1991): “Structural and Return Characteristics of Small and Large Firms.” *Journal of Finance* 46, 1467–1484.
- Chan, Louis K. C., Josef Lakonishok, and Theodore Sougiannis (2001): “The Stock Market Valuation of Research and Development Expenditures.” *Journal of Finance* 56, 2431–2456.
- Chen, Huafeng Jason, Marcin Kacperczyk, and Hernan Ortiz-Molina (2011): “Labor Unions, Operating Flexibility, and the Cost of Equity.” *Journal of Financial and Quantitative Analysis* 46, 25–58.
- Chui, Andy C.W., Sheridan Titman, and K.C. John Wei (2010): “Individualism and Momentum around the World.” *Journal of Finance* 65, 361–392.
- Core, John E., Wayne R. Guay, and Tjomme O. Rusticus (2006): “Does Weak Governance Cause Weak Stock Returns? An Examination of Firm Operating Performance and Investors’ Expectations.” *Journal of Finance* 61, 655–687.
- Cronqvist, Henrik, Fredrik Heyman, Mattias Nilsson, Helena Svaleryd, and Jonas Vlachos (2009): “Do Entrenched Managers Pay Their Workers More?” *Journal of Finance* 64, 309–339.
- Derwall, Jeroen, Nadja Guenster, Rob Bauer, and Kees Koedijk (2005): “The Eco-Efficiency Premium Puzzle.” *Financial Analysts Journal* 61, 51–63.
- Dhrymes, Phoebus J. (1998): “Socially Responsible Investment: Is It Profitable?” In: Bruce, B. (Ed.), *The Investment Research Guide to Socially Responsible Investing*. The Colloquium on Socially Responsible Investing, Plano, TX, 264–284.
- Diltz, J. David (1995): “Does Social Screening Affect Portfolio Performance?” *Journal of Investing* 4, 64–69.
- Donangelo, Andres (2014): “Labor Mobility: Implications for Asset Pricing.” *Journal of Finance* 69, 1321–1346.
- Eccles, Robert, Ioannis Ioannou, and George Serafeim (2014) “The Impact of Corporate Sustainability on Organizational Processes and Performance.” *Management Science* 60, 2835–2857.

- Easterwood, John C. and Stacey R. Nutt (1999): “Inefficiency in Analysts’ Earnings Forecasts: Systematic Misreaction or Systematic Optimism?” *Journal of Finance* 43, 153–193.
- Edmans, Alex (2011): “Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices.” *Journal of Financial Economics* 101, 621–640.
- Edmans, Alex (2012): “The Link between Job Satisfaction and Firm Value, with Implications for Corporate Social Responsibility.” *Academy of Management Perspectives* 26, 1–19.
- Faleye, Olubunmi, Vikas Mehrotra, and Randall Morck (2006): “When Labor Has a Voice in Corporate Governance.” *Journal of Financial and Quantitative Analysis* 41, 489–510.
- Fama, Eugene F. and Kenneth R. French (1997): “Industry Costs of Equity.” *Journal of Financial Economics* 43, 153–193.
- Fama, Eugene F. and Kenneth R. French (2012): “Size, Value, and Momentum in International Stock Returns.” *Journal of Financial Economics* 105, 457–472.
- Fama, Eugene F. and Kenneth R. French (2017): “International Tests of a Five-Factor Asset Pricing Model.” *Journal of Financial Economics* 123, 441–463.
- Fernandes, Nuno and Miguel A. Ferreira (2009): “Insider Trading Laws and Stock Price Informativeness.” *Review of Financial Studies* 22, 1845–1887.
- Fornell, Claes, Sunil Mithas, Forrest V. Morgeson III, and M.S. Krishnan (2006): “Customer Satisfaction and Stock Prices: High Returns, Low Risk.” *Journal of Marketing* 70, 3–14.
- Gao, Pengjie, Christopher A. Parsons, and Jianfeng Shen (2018): “The Global Relation Between Financial Distress and Equity Returns.” *Review of Financial Studies*, 31, 239-277.
- Giroud, Xavier and Holger M. Mueller (2011): “Corporate Governance, Product Market Competition, and Equity Prices.” *Journal of Finance* 66, 563–600.
- Gompers, Paul, Joy Ishii, and Andrew Metrick (2003): “Corporate Governance and Equity Prices.” *Quarterly Journal of Economics* 118, 107–156.
- Gorton, Gary and Frank A. Schmid (2004): “Capital, Labor, and the Firm: A Study of German Codetermination.” *Journal of the European Economic Association* 2, 863–905.

- Griffin, John M. (2002): “Are the Fama and French Factors Global or Country Specific?” *Review of Financial Studies* 15, 783–803.
- Guo, Hui and Robert Savickas (2008): “Average Idiosyncratic Volatility in G7 Countries.” *Review of Financial Studies* 21, 1259–1296.
- Hamilton, Sally, Hoje Jo, and Meir Statman (1993): “Doing Well while Doing Good: the Investment Performance of Socially Responsible Mutual Funds.” *Financial Analysts Journal* 49, 62–66.
- Hertzberg, Frederick (1959): *The Motivation to Work*. New York: John Wiley & Sons.
- Hochberg, Yael V. and Laura Lindsey (2010): “Incentives, Targeting, and Firm Performance: An Analysis of Non-Executive Stock Options.” *Review of Financial Studies* 23, 4148–4186.
- Hofstede, Geert (1980): *Culture’s Consequences: International Differences in Work-Related Values*. Beverly Hills CA: Sage Publications.
- Holderness, Clifford G. (2016): “Problems with using Aggregate Data to Infer Individual Behavior: Evidence from Law, Finance, and Ownership.” *Critical Finance Review* 5, 1–40.
- Hong, Harrison and Marcin Kacperczyk (2009): “The Price of Sin: the Effect of Social Norms on Markets.” *Journal of Financial Economics* 93, 15–36.
- Huselid, Mark A. (1995): “The Impact of Human Resource Practices on Turnover, Productivity, and Corporate Financial Performance.” *Journal of Financial Economics* 38, 635–672.
- Jacobson, Robert (1987): “The Validity of ROI as a Measure of Business Performance.” *American Economic Review* 77, 470–478.
- Jensen, Michael C. and William H. Meckling (1976): “Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure.” *Journal of Financial Economics* 3, 305–360.
- Jenter, Dirk, Katharina A. Lewellen, and Jerold B. Warner (2011): “Security Issue Timing: What Do Managers Know, and When Do They Know It?” *Journal of Finance* 66, 413–443.
- Khan, Mozaffar, George Serafeim, and Aaron Yoon (2016): “Corporate Sustainability: First Evidence on Materiality.” *The Accounting Review* 91, 1697–1724.
- Kim, E. Han and Paige Ouimet (2014): “Employee Stock Option Plans: Employee Compensation and Firm Value.” *Journal of Finance* 69, 1273–1319.

- La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer, and Robert W. Vishny (1997): “Legal Determinants of External Finance.” *Journal of Finance* 52, 1131–1150.
- Lakonishok, Josef, Andrei Shleifer, and Robert W. Vishny (1994): “Contrarian Investment, Extrapolation, and Risk.” *Journal of Finance* 49, 1541–1578.
- Lee, David. S. and Alexandre Mas (2012): “Long-run Impacts of Unions on Firms: New Evidence from Financial Markets, 1961–1999.” *Quarterly Journal of Economics* 127, 333–378.
- Lins, Karl V., Henri Servaes, and Ane Tamayo (2017): “Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility During the Financial Crisis.” *Journal of Finance* 72, 1785–1824.
- Macduffie, John Paul (1995): “Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry.” *Industrial and Labor Relations Review* 48, 179–221.
- Maslow, Abraham H. (1943): “A Theory of Human Motivation.” *Psychological Review* 50, 370–396.
- Mayo, Edwin (1949): *Hawthorne and the Western Electric Company: The Social Problems of an Industrial Civilisation*. London: Routledge.
- Messina, Julian and Giovanna Vallanti (2007): “Job Flow Dynamics and Firing Restrictions: Evidence from Europe.” *Economic Journal* 117, F279–F301.
- Milgrom, Paul and John Roberts (1995): “Complementarities and Fit: Strategy, Structure, and Organizational Design in Manufacturing.” *Journal of Accounting and Economics* 19, 179–208.
- Mueller, Holger M., Paige P. Ouimet, and Elena Simintzi (2017): “Within-Firm Pay Inequality.” *Review of Financial Studies* 30, 3605–3635.
- Newey, Whitney K. and Kenneth West (1987): “A Simple, Positive Semidefinite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix.” *Econometrica* 55, 703–708.
- OECD (1996): “Employment Adjustment, Workers and Unemployment.” *OECD Employment Outlook*, Chapter 5.
- OECD (2013): “Protecting Jobs, Enhancing Flexibility: A New Look at Employment Protection Legislation.” *OECD Employment Outlook*, Chapter 2.

- Ouimet, Paige and Rebecca Zarutskie (2020): “Acquiring Labor.” *Quarterly Journal of Finance*, forthcoming.
- Pagano, Marco and Paolo F. Volpin (2005a): “Managers, Workers, and Corporate Control.” *Journal of Finance* 60, 843–870.
- Pagano, Marco and Paolo F. Volpin (2005b): “The Political Economy of Corporate Governance.” *American Economic Review* 95, 1005–1030.
- Petersen, Mitchell A. (2009): “Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches.” *Review of Financial Studies* 22, 435–480.
- Renneboog, Luc, Jenke Ter Horst, and Chendi Zhang (2008): “The Price of Ethics and Stakeholder Governance: The Performance of Socially Responsible Mutual Funds.” *Journal of Corporate Finance* 14, 302–328.
- Roethlisberger, F. J. and William J. Dickson (1939). *Management and the Worker*. Cambridge: Harvard University Press.
- Schröder, Michael (2007): “Is there a Difference? The Performance Characteristics of SRI Equity Indices.” *Journal of Business Finance and Accounting* 34, 331–348.
- Shapiro, Carl and Joseph E. Stiglitz (1984): “Equilibrium Unemployment as a Worker Discipline Device.” *American Economic Review* 74, 433–444.
- Simintzi, Elena, Vikrant Vig, and Paolo Volpin (2015): “Labor Protection and Leverage.” *Review of Financial Studies* 28, 561–591.
- Spamann, Holger (2010): “The Antidirector Rights Index Revisited.” *Review of Financial Studies* 23, 467–486.
- Statman, Meir and Denys Glushkov (2008): “The Wages of Social Responsibility.” *Financial Analysts Journal* 65, 33–46.
- Tate, Geoffrey A. and Liu Yang (2016): “The Human Factor in Acquisitions: Cross-Industry Labor Mobility and Corporate Diversification.” Working Paper, University of Maryland.
- Taylor, Frederick Winslow (1911): *The Principles of Scientific Management*. Harper Brothers, New York.
- Thelen, Kathleen (2001): “Varieties of Labor Politics in the Developed Democracies.” In Hall, P. A. and Soskice, D. (eds) (2001) *Varieties of Capitalism: the Institutional Foundations of Comparative Advantage*, Oxford: Oxford University Press, 71–103.

Table 1
Summary statistics of employee satisfaction measure

Panel A: Publicly-listed Best Companies to Work For

Panel A reports the list of countries in which at least one Best Company (BC) is headquartered and publicly listed. For each country, column (1) presents the year of the first published BC list Column (2) reports our portfolio formation date, which is typically one month after the month of list publication. Column (3) gives the number of publicly listed BCs per country after sample screening. Column (4) presents the total number of listed firms including BCs after sample screening. Column (5) records the total number of firm-month observations. Column (6) indicates the total number of BCs (both private and public) in the year the list was initiated. Column (7) indicates the total number of BCs (both private and public) in the last listing year. Column (8) presents the current main media publication outlet whenever found. The sample period is October 1997 to December 2017.

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		First list	Formation	Public	Total	Observations	List size	List size	Publication outlet
		Year	Date	BC #	Firm #	Number	First	Last	Main
1	Argentina	2002	Dec-01	4	98	11,557	25	50	Clarín
2	Australia	2008	Sep-01	5	2,210	136,577	8	50	Financial Review
3	Belgium	2003	Apr-01	9	239	24,141	25	20	Mark Magazine
4	Brazil	1997	Oct-01	25	333	21,584	30	90	Época Magazine
5	Canada	2006	May-01	13	4,496	270,590	30	108	The Globe and Mail
6	Chile	2001	Dec-01	14	107	9,554	25	50	El Mercurio
7	Colombia	2003	Jul-01	10	13	902	12	35	Dinero
8	Denmark	2001	Dec-01	20	255	26,683	50	60	Dansk Erhverv
9	Finland	2003	Mar-01	12	201	22,576	20	50	Talouselämä
10	France	2002	Apr-01	20	1,266	119,743	5	108	Le Figaro
11	Germany	2003	Feb-01	27	1,341	111,382	50	100	Handelsblatt
12	Greece	2003	Mar-01	12	345	37,863	10	25	To Vima
13	India	2003	Aug-01	66	2,941	207,993	25	100	The Economic Times
14	Ireland	2003	Apr-01	4	100	9,249	50	79	The Irish Times
15	Italy	2002	Apr-01	4	454	44,774	30	55	Corriere Della Sera
16	Japan	2007	Mar-01	52	1,430	87,427	10	95	Nikkei Business
17	Mexico	2002	May-01	18	192	18,045	20	205	Reforma

18	Netherlands	2003	Apr-01	5	216	19,732	10	39	MT
19	Norway	2004	Apr-01	10	348	24,462	10	25	GPTW Norway
20	Peru	2002	Jan-01	15	166	12,570	25	50	El Comercio
21	Portugal	2000	May-01	3	93	9,058	10	20	RH Magazine
22	Saudi Arabia	2014	Jan-01	5	174	5,867	15	17	Saudi Gazette
23	South Korea	2002	Dec-01	40	242	13,719	20	25	The Korea Economic Daily
24	Spain	2003	Aug-01	6	261	22,085	25	50	GPTW Magazine
25	Sweden	2003	Apr-01	11	754	52,338	25	54	GPTW Sweden
26	Switzerland	2009	June-01	2	336	23,743	10	25	20 Minuten
27	Turkey	2013	Sep-01	3	383	17,201	12	25	Kariyer.net
28	United Kingdom	2001	May-01	32	4,026	340,907	50	128	The Guardian
29	United States	1998	Feb-01	194	11,819	1,036,496	100	100	Fortune
30	Venezuela	2005	Apr-01	2	38	2,464	10	10	El Nacional
	<i>Total</i>			643	34,877	2,741,282			

Table 1 (Cont'd)**Panel B: Employment protection legislation**

Panel B summarizes the OECD EPL indicators. Columns (1)-(3) show the time-series averages of these individual components: individual dismissal of workers with regular contracts (EPR), additional costs for collective dismissals (EPC), and regulation of temporary contracts (EPT). Column (4) presents our first EPL measure, calculated as 10 minus the arithmetic average of the three components for a given country-year. Column (5) presents our second EPL measure, calculated as 10 minus the weighted average of the three components for a given country-year. The weights are 10/21 for EPR, 4/21 for EPC, and 7/21 for EPT. The sample period is 1997-2017.

		(1)	(2)	(3)	(4)	(5)
		EPR	EPC	EPR	EPL1	EPL2
		Individual dismissals	Collective dismissals	Temporary contracts	Simple average	Weighted average
1	Argentina	1.820	3.880	2.380	7.307	7.601
2	Australia	1.570	2.880	0.880	8.223	8.410
3	Belgium	1.915	5.130	2.380	6.858	7.317
4	Brazil	1.463	0.667	4.130	7.913	7.800
5	Canada	0.920	2.970	0.250	8.620	8.913
6	Chile	2.630	0.000	3.000	8.123	7.748
7	Colombia	1.370	4.000	1.880	7.583	7.959
8	Denmark	2.130	3.630	1.380	7.620	7.834
9	Finland	2.170	1.880	1.560	8.130	8.089
10	France	2.411	3.380	3.630	6.860	6.998
11	Germany	2.680	3.630	1.077	7.538	7.673
12	Greece	2.489	3.250	2.667	7.198	7.307
13	India	3.290	0.440	1.810	8.153	7.746
14	Ireland	1.356	3.350	0.605	8.230	8.515
15	Italy	2.748	4.072	2.029	7.051	7.240
16	Japan	1.370	3.250	0.880	8.167	8.435
17	Mexico	2.140	4.380	3.394	6.695	7.015
18	Netherlands	2.844	3.063	0.940	7.718	7.749
19	Norway	2.330	2.500	2.964	7.402	7.426
20	Peru	1.750	3.750	2.250	7.417	7.702
21	Portugal	3.999	2.292	2.201	7.169	6.926
22	Saudi Arabia	1.370	0.000	3.380	8.417	8.221
23	South Korea	2.370	1.880	2.130	7.873	7.803
24	Spain	2.237	3.627	2.870	7.089	7.287
25	Sweden	2.610	2.500	1.440	7.817	7.801
26	Switzerland	1.600	3.630	1.130	7.880	8.170
27	Turkey	2.310	2.630	4.880	6.727	6.772
28	United Kingdom	1.260	2.880	0.348	8.504	8.736
29	United States	0.260	2.880	0.250	8.870	9.244
30	Venezuela	3.500	3.500	5.130	5.957	5.957
	Mean	2.097	2.864	2.128	7.637	7.746
	Std. Dev.	0.790	1.250	1.302	0.665	0.684

Table 2
Summary statistics of firm-level and country-level variables

Panel A: Firm-level descriptive statistics

This table presents the descriptive statistics of firm-level variables used in the regressions. N refers to the number of firm-month observations of 33,742 firms in 30 countries from October 1997 to December 2017. All variables are described in Appendix A.

	N	Mean	Median	Std.	Min	Max
<i>Raw return (%)</i>	2,741,282	1.344	0.222	17.545	-63.228	167.727
<i>Excess return over r_f (%)</i>	2,741,282	1.219	0.104	17.547	-63.393	167.514
<i>SIZE (log)</i>	2,741,282	11.922	11.839	2.437	4.605	19.098
<i>BM (log)</i>	2,741,282	0.988	0.620	1.941	0.000	38.169
<i>YLD (%)</i>	2,741,282	1.838	0.000	5.250	0.000	110.280
<i>RET2-3 (log)</i>	2,741,282	-0.000	0.007	0.238	-1.427	1.385
<i>RET4-6 (log)</i>	2,741,282	0.001	0.012	0.291	-1.682	1.612
<i>RET7-12 (log)</i>	2,741,282	0.274	0.226	0.475	-1.969	2.025
<i>VOL (log)</i>	2,741,282	8.173	8.268	3.877	-5.627	17.199
<i>PRC (log)</i>	2,741,282	-1.538	-1.833	2.035	-7.957	4.893

Panel B: Country-level descriptive statistics

This table presents the descriptive statistics of country-level control variables used in the regressions. N refers to the number of country-year observations in 30 countries from October 1997 to December 2017. All variables are described in Appendix A.

	N	Mean	Median	Std. Dev	Min	Max
<i>RuleofLaw</i>	359	7.514	8.333	2.386	2.083	10.000
<i>GDPg (%)</i>	359	2.438	2.308	3.315	-10.894	25.557
<i>GDP (log)</i>	359	3.041	3.413	1.062	-0.614	4.635
<i>ADRI</i>	359	3.699	4.000	0.999	2.000	5.000
<i>IDV</i>	359	53.290	51.000	24.597	13.000	91.000
<i>PriceInf</i>	359	1.853	1.379	2.288	-2.005	16.809
<i>MktCapGDP (%)</i>	359	69.866	61.336	41.671	6.274	248.421

Table 2 (cont'd)**Panel C: Pairwise correlations of country-level variables**

This table displays the Pearson's pairwise correlation coefficients between the country-level variables described in Table 2 Panel B. All variables are described in Appendix A. *** indicates significance at the 1% level.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) <i>EPL1</i>	1.000								
(2) <i>EPL2</i>	0.930***	1.000							
(3) <i>RuleofLaw</i>	0.189***	0.232***	1.000						
(4) <i>GDPg (%)</i>	0.152***	0.091	-0.351***	1.000					
(5) <i>GDP (log)</i>	0.087	0.229***	0.826***	-0.378***	1.000				
(6) <i>ADRI</i>	0.167***	0.005	-0.117	0.135	-0.119	1.000			
(7) <i>IDV</i>	0.302***	0.425***	0.801***	-0.180***	0.654***	-0.218***	1.000		
(8) <i>PriceInf</i>	0.156***	0.168***	-0.132	0.057	-0.139***	0.040	-0.060	1.000	
(9) <i>MktCapGDP (%)</i>	0.525***	0.518***	0.425***	0.076	0.338***	0.075	0.394***	0.057	1.000

Table 3
Four-factor alpha of BC portfolios

Panel A: Country-level alphas

This table reports regression results of monthly returns of equal-weighted portfolios of Best Companies using Carhart's (1997) four-factor model:

$$R_{ct} = \alpha + \beta_{MKT}MKT_{ct} + \beta_{HML}HML_{ct} + \beta_{SMB}SMB_{ct} + \beta_{MOM}MOM_{ct} + \varepsilon_{ct},$$

where R_{ct} is the return on an equal-weighted or value-weighted portfolio of listed BCs in month t for country c in excess of the risk-free rate. α is the intercept that captures the abnormal risk-adjusted return. MKT_{ct} , HML_{ct} , SMB_{ct} , and MOM_{ct} , are, respectively, the Fama and French (2012) regional factors on market, value, size, and momentum. Standard errors, given in parentheses, are adjusted for heteroscedasticity and four lags of autocorrelation. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	Equal-weighted			Value-weighted			Obs.
	α	Std. Err.	Adj. R ²	α	Std. Err.	Adj. R ²	
1 Brazil	0.881	(0.613)	0.258	0.865	(0.580)	0.267	240
2 Canada	0.310	(0.435)	0.495	0.141	(0.272)	0.628	140
3 Chile	0.711	(0.436)	0.269	0.090	(0.164)	0.184	162
4 Columbia	0.206	(0.665)	0.121	0.259	(0.385)	0.171	56
5 Denmark	0.036	(0.407)	0.537	0.200	(0.442)	0.311	164
6 Finland	1.303**	(0.564)	0.386	1.041*	(0.544)	0.411	154
7 France	0.355	(0.412)	0.539	0.268	(0.410)	0.440	143
8 Germany	-0.203	(0.349)	0.629	-0.400	(0.387)	0.527	165
9 Greece	0.276	(0.816)	0.259	-0.031	(0.725)	0.266	129
10 India	1.460***	(0.441)	0.533	0.774*	(0.402)	0.446	161
11 Japan	0.633**	(0.281)	0.608	0.517***	(0.180)	0.331	130
12 Mexico	0.021	(0.509)	0.426	0.016	(0.489)	0.445	149
13 Norway	0.333	(0.563)	0.343	-0.079	(0.601)	0.392	141
14 Peru	0.818**	(0.387)	0.023	0.085	(0.579)	0.048	157
15 Korea	0.496	(0.566)	0.305	0.385	(0.349)	0.221	123
16 Sweden	0.531	(0.362)	0.541	0.235	(0.367)	0.509	177
17 U.K.	0.555*	(0.322)	0.461	0.595*	(0.316)	0.360	200
18 U.S.	0.287***	(0.110)	0.903	0.214	(0.142)	0.849	239

Panel B: Country-level alphas and labor market flexibility

This table reports the weighted least squares regression results of cross-country alphas based on portfolios of Best Companies using Carhart's (1997) four-factor model, where the weights are the inverse of the squared standard errors of the alpha estimates. Both alphas and their standard errors are from Table 3 Panel A and Panel B. *EPL1* and *EPL2* are the two measures of labor market flexibility described in Table 1, Panel B. Their values are chosen at the year before the start of each country's BC list.

	<i>EPL1</i>		<i>EPL2</i>	
	Alpha (EW)	Alpha (VW)	Alpha (EW)	Alpha (VW)
<i>EPL</i>	0.325** (0.116)	0.391*** (0.104)	0.219* (0.110)	0.339*** (0.103)
<i>Constant</i>	-1.948** (0.830)	-2.644*** (0.742)	-1.157 (0.773)	-2.276*** (0.718)
Observations	18	18	18	18
R-squared	0.30	0.45	0.12	0.29

Table 4
Stock returns by country, controlling for firm characteristics

This table reports results of monthly firm-level pooled panel regressions:

$$R_{it} = \beta_0 + \beta_1 BC_{it} + \beta_2 FirmControls_{it} + \varepsilon_{it},$$

where R_{it} is the return for firm i in month t , either raw, market-adjusted, or industry-adjusted. BC_{it} is a dummy variable that equals one if firm i has been included in the most recent BC list prior to month t , and zero otherwise. $FirmControls_{it}$ include the following firm-level controls: $SIZE$ is the log of firm i 's market capitalization at the end of month $t-2$; BM is the log of firm i 's book-to-market ratio at the end of month $t-2$; YLD is firm i 's dividend yield as measured by the total dividends paid over the 12 months prior to month t , divided by the share price at the end of month $t-2$; $RET2-3$ is the log of one plus firm i 's cumulative return over months $t-3$ through $t-2$; $RET4-6$ and $RET7-12$ are defined similarly; VOL is the log of firm i 's dollar trading volume in month $t-2$; PRC is the log of firm i 's price at the end of month $t-2$. We include year-month fixed effects and winsorize stock returns at 0.1% in each tail. We report only the coefficient on BC for brevity. Standard errors, given in parentheses, are clustered by year-month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

		Dependent Variable		
		Raw returns	Market-adjusted	Industry-adjusted
1	Argentina	-0.202 (0.589)	-0.200 (0.588)	-0.074 (0.598)
2	Australia	2.325*** (0.815)	2.327*** (0.815)	2.109*** (0.756)
3	Belgium	0.259 (0.533)	0.272 (0.532)	0.187 (0.519)
4	Brazil	0.868* (0.441)	0.839* (0.440)	0.764* (0.440)
5	Canada	1.758*** (0.429)	1.760*** (0.429)	1.509*** (0.404)
6	Chile	0.133 (0.285)	0.139 (0.284)	0.052 (0.291)
7	Colombia	-0.720 (0.764)	-0.673 (0.732)	-0.669 (0.771)
8	Denmark	-0.559 (0.406)	-0.560 (0.406)	-0.521 (0.408)
9	Finland	0.378 (0.427)	0.377 (0.427)	0.280 (0.425)
10	France	0.172 (0.605)	0.175 (0.603)	0.046 (0.601)
11	Germany	0.342 (0.341)	0.343 (0.341)	0.333 (0.334)
12	Greece	0.943 (0.799)	0.945 (0.798)	1.019 (0.812)
13	India	1.186***	1.184***	1.073***

		(0.340)	(0.340)	(0.335)
14	Ireland	-0.888	-0.886	-0.643
		(0.870)	(0.870)	(0.869)
15	Italy	-0.561	-0.570	-0.469
		(0.945)	(0.944)	(0.942)
16	Japan	0.772**	0.778***	0.735**
		(0.299)	(0.297)	(0.295)
17	Mexico	0.087	0.086	0.042
		(0.271)	(0.270)	(0.268)
18	Netherlands	-0.334	-0.336	-0.238
		(0.664)	(0.665)	(0.668)
19	Norway	0.438	0.428	0.378
		(0.663)	(0.662)	(0.650)
20	Peru	0.514	0.512	0.263
		(0.521)	(0.517)	(0.518)
21	Portugal	0.146	0.153	0.705
		(1.214)	(1.214)	(1.213)
22	Saudi Arabia	0.053	0.059	-0.173
		(0.919)	(0.919)	(0.882)
23	South Korea	0.786	0.797	0.801
		(0.650)	(0.651)	(0.637)
24	Spain	0.057	0.055	0.005
		(0.429)	(0.430)	(0.423)
25	Sweden	0.385	0.387	0.342
		(0.349)	(0.349)	(0.354)
26	Switzerland	-0.884	-0.879	-0.797
		(0.958)	(0.958)	(0.957)
27	Turkey	-0.208	-0.208	-0.255
		(1.173)	(1.173)	(1.159)
28	United Kingdom	0.138	0.138	0.032
		(0.323)	(0.324)	(0.319)
29	United States	0.366**	0.367**	0.381***
		(0.151)	(0.152)	(0.144)
30	Venezuela	0.967	0.955	0.902
		(1.682)	(1.681)	(1.679)

Table 5
Stock returns across countries

Panel A: EPL1

This table reports the results of pooled panel regressions across countries:

$$R_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls_{cit} + \varepsilon_{cit},$$

where R_{cit} is the return for firm i in month t , either raw, market-adjusted, or industry-adjusted. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to month t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPL1$ or $EPL2$) described in Table 1, Panel B. $CountryControls_{ct}$ include the following country-level controls: $RuleofLaw$ measures the rule of law from La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997); $GDPg$ measures GDP growth; GDP measures GDP per capita; $ADRI$ measures the anti-director rights index corrected by Spamann (2010); IDV is the Hofstede measure of cultural individualism; $PriceInf$ is the price informativeness measure of Fernandes and Ferreira (2009); and $MktCapGDP$ is stock market capitalization over GDP. $FirmControls_{cit}$ include the firm-level controls described in Table 4. The regression constant is not reported for brevity. Standard errors, given in parentheses, are double clustered by country and year-month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Raw returns			Market-adjusted returns			Industry-adjusted returns		
BC_{cit}	0.613*** (0.165)	-2.730*** (0.618)	-4.586** (1.840)	0.609*** (0.172)	-2.760*** (0.563)	-4.426** (1.872)	0.575*** (0.154)	-2.838*** (0.565)	-3.507*** (1.239)
$BC_{cit} * EPL_{ct}$		0.400*** (0.091)	0.629** (0.254)		0.403*** (0.087)	0.543** (0.247)		0.409*** (0.081)	0.513*** (0.189)
EPL_{ct}		0.715 (1.119)	0.032 (0.833)		0.921 (0.957)	0.217 (0.926)		0.760 (1.091)	0.208 (0.769)
$BC_{cit} * RuleofLaw_c$			-0.064 (0.107)			-0.009 (0.093)			-0.056 (0.101)
$BC_{cit} * GDPg_{ct}$			0.084 (0.097)			0.108 (0.099)			0.057 (0.091)
$BC_{cit} * GDP_{ct}$			0.242 (0.229)			0.180 (0.230)			0.198 (0.198)
$BC_{cit} * ADRI_c$			0.058			0.069			0.004

			(0.068)			(0.059)			(0.058)
<i>BC_{cit}*PriceInf_{ct}</i>			-0.073			-0.082			-0.084
			(0.059)			(0.050)			(0.054)
<i>BC_{cit}*MktCapGDP_{ct}</i>			-0.009			-0.008			-0.005
			(0.005)			(0.006)			(0.004)
<i>BC_{cit}*IDV_c</i>			0.007			0.008			0.005
			(0.011)			(0.010)			(0.011)
<i>RuleofLaw_c</i>			0.068			-0.015			0.065
			(0.454)			(0.364)			(0.414)
<i>GDPg_{ct}</i>			0.077			0.002			0.115
			(0.118)			(0.109)			(0.112)
<i>GDP_{ct}</i>			-3.079**			-2.159*			-2.596**
			(1.381)			(1.171)			(1.181)
<i>ADRI_c</i>			-2.520***			-1.650**			-2.308***
			(0.834)			(0.798)			(0.753)
<i>PriceInf_{ct}</i>			0.076			0.093			0.064
			(0.070)			(0.067)			(0.064)
<i>MktCapGDP_{ct}</i>			0.047***			0.031**			0.040***
			(0.013)			(0.014)			(0.010)
<i>IDV_c</i>			-0.060			-0.038			-0.058
			(0.040)			(0.036)			(0.037)
<i>SIZE</i>	-0.259***	-0.260***	-0.223**	-0.234***	-0.235***	-0.209**	-0.275***	-0.276***	-0.243***
	(0.088)	(0.088)	(0.095)	(0.090)	(0.090)	(0.096)	(0.083)	(0.083)	(0.089)
<i>BM</i>	0.278***	0.277***	0.283***	0.278***	0.278***	0.282***	0.263***	0.263***	0.269***
	(0.040)	(0.040)	(0.039)	(0.040)	(0.040)	(0.039)	(0.038)	(0.038)	(0.038)
<i>YIELD</i>	0.023**	0.023**	0.019*	0.021**	0.021**	0.018*	0.017*	0.017*	0.013
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.009)
<i>RET2-3</i>	-0.048	-0.050	-0.130	-0.122	-0.124	-0.137	-0.370	-0.372	-0.434
	(0.485)	(0.485)	(0.520)	(0.485)	(0.485)	(0.528)	(0.471)	(0.472)	(0.509)
<i>RET4-6</i>	0.001	-0.000	0.008	0.057	0.055	0.087	-0.087	-0.089	-0.086
	(0.534)	(0.534)	(0.559)	(0.533)	(0.533)	(0.554)	(0.505)	(0.506)	(0.528)

<i>RET7-12</i>	-0.184 (0.385)	-0.185 (0.385)	-0.120 (0.376)	-0.071 (0.377)	-0.071 (0.377)	-0.011 (0.369)	-0.205 (0.344)	-0.205 (0.344)	-0.144 (0.337)
<i>VOL</i>	0.121** (0.048)	0.122** (0.048)	0.084** (0.043)	0.106** (0.052)	0.107** (0.051)	0.075* (0.044)	0.152*** (0.043)	0.153*** (0.043)	0.120*** (0.038)
<i>PRC</i>	0.279*** (0.080)	0.279*** (0.080)	0.307*** (0.081)	0.289*** (0.078)	0.288*** (0.078)	0.310*** (0.080)	0.333*** (0.083)	0.332*** (0.083)	0.366*** (0.083)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281
R-squared	0.108	0.108	0.111	0.024	0.024	0.026	0.039	0.039	0.041

Panel B: *EPL2*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Raw returns			Market-adjusted returns			Industry-adjusted returns		
<i>BC_{cit}</i>	0.613*** (0.165)	-2.466*** (0.510)	-4.138** (1.645)	0.609*** (0.172)	-2.327*** (0.391)	-4.148** (1.677)	0.575*** (0.154)	-2.575*** (0.457)	-3.046** (1.192)
<i>BC_{cit}*EPL_{ct}</i>		0.359*** (0.079)	0.551** (0.223)		0.343*** (0.068)	0.494** (0.216)		0.368*** (0.071)	0.436** (0.176)
<i>EPL_{ct}</i>		0.912 (1.192)	0.052 (0.885)		0.870 (0.852)	0.031 (0.915)		0.967 (1.179)	0.272 (0.818)
BC* Country Controls	No	No	Yes	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes	No	No	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281
R-squared	0.108	0.108	0.111	0.024	0.024	0.026	0.039	0.039	0.041

Table 6
Tobin's Q across countries

This table reports results of the least absolute deviation median regressions across countries:

$$Q_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls2_{cit} + \varepsilon_{cit}$$

where Q_{cit} is industry-adjusted Tobin's Q for firm i in country c in year t at the start of the return compounding window, i.e. at the start of the month following list publication. Tobin's Q is calculated as the sum of book assets plus market equity, minus the sum of book equity plus balance sheet deferred taxes, all divided by book assets. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPL1$ or $EPL2$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. $FirmControls2_{cit}$ include the following firm-level controls: ROE is the return on equity as measured by income divided by book equity. $Book$ is the log of book value of assets. $FROE$, $F2ROE$, and $F3ROE$ are the return on equity for the next three years. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered at the country level. The regression constant is not reported for brevity. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	<i>EPL1</i>			<i>EPL2</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
	Industry-adjusted Tobin's Q			Industry-adjusted Tobin's Q		
<i>BC_{cit}</i>	0.539*** (0.036)	-2.424*** (0.331)	-0.597** (0.300)	0.539*** (0.036)	-2.378*** (0.281)	-0.621* (0.370)
<i>BC_{cit}*EPL_{ct}</i>		0.362*** (0.044)	0.172*** (0.042)		0.346*** (0.036)	0.165*** (0.046)
<i>EPL_{ct}</i>		-0.035 (0.022)	0.087*** (0.027)		-0.046** (0.023)	0.085*** (0.025)
<i>Book</i>	-0.022*** (0.001)	-0.022*** (0.001)	-0.020*** (0.001)	-0.022*** (0.001)	-0.022*** (0.001)	-0.020*** (0.001)
<i>ROE</i>	-0.025*** (0.003)	-0.025*** (0.003)	-0.026*** (0.005)	-0.025*** (0.003)	-0.025*** (0.003)	-0.026*** (0.005)
<i>FROE</i>	0.007*** (0.001)	0.007*** (0.001)	0.006*** (0.002)	0.007*** (0.001)	0.007*** (0.001)	0.006*** (0.002)
<i>F2ROE</i>	0.005** (0.002)	0.005*** (0.002)	0.004*** (0.001)	0.005** (0.002)	0.005*** (0.002)	0.004*** (0.001)
<i>F3ROE</i>	0.003*** (0.001)	0.003*** (0.001)	0.002 (0.002)	0.003*** (0.001)	0.003*** (0.001)	0.002 (0.002)
<i>BC*Country Controls</i>	No	No	Yes	No	No	Yes
<i>Country Controls</i>	No	No	Yes	No	No	Yes
<i>Country FE</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Year-month FE</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Observations</i>	147,622	147,622	135,567	147,622	147,622	135,567
<i>R-squared</i>	0.033	0.030	0.022	0.033	0.030	0.022

Table 7
Operating performance across countries

Panel A: Industry-adjusted return on assets

This table reports results of the least absolute deviation regressions across countries:

$$ROA_{cit+j} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 BM_{cit} + \delta_4 ROA_{cit} + \varepsilon_{cit},$$

where ROA_{cit+j} is the return on assets calculated as operating income before depreciation divided by book value of assets for firm i in country c in year $t+j$ (for $j \in \{1, 2\}$), and then adjusted by subtracting the industry median. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPLI$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is firm i 's log book-to-market ratio at the beginning of year t . ROA is the current year's return on assets. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered at the country level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One year ahead			Two years ahead		
BC_{cit}	1.801*** (0.169)	-8.834*** (1.065)	-8.211*** (1.938)	1.485*** (0.144)	-9.161*** (0.990)	-4.259 (2.737)
$BC_{cit} * EPL_{ct}$		1.285*** (0.139)	1.143*** (0.214)		1.314*** (0.127)	0.601* (0.324)
EPL_{ct}		0.285* (0.156)	-0.441** (0.173)		0.764*** (0.170)	-0.008 (0.197)
BM	-0.301*** (0.022)	-0.302*** (0.022)	-0.349*** (0.021)	-0.198*** (0.016)	-0.197*** (0.017)	-0.230*** (0.020)
ROA	0.219*** (0.024)	0.219*** (0.021)	0.198*** (0.015)	0.206*** (0.024)	0.205*** (0.024)	0.187*** (0.019)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	171,043	171,043	153,465	146,814	146,814	132,448
R-squared	0.041	0.041	0.040	0.027	0.028	0.026

Table 7 (Cont'd)

Panel B: Industry-adjusted net profit margin

This table reports results of the least absolute deviation regressions across countries:

$$NPM_{cit+j} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 BM_{cit} + \delta_4 NPM_{cit} + \varepsilon_{cit},$$

where NPM_{cit+j} is the net profit margin calculated as operating income before depreciation divided by sales for firm i in country c in year $t+j$ (for $j \in \{1, 2\}$), and then industry adjusted. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPLI$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is firm i 's log book-to-market ratio at the beginning of year t . NPM is the current year's net profit margin. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered at the country level. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One year ahead			Two years ahead		
BC_{cit}	2.356*** (0.259)	-16.070*** (2.447)	-13.572*** (4.126)	3.384*** (0.372)	-20.713*** (2.857)	-13.445* (7.164)
$BC_{cit} * EPL_{ct}$		2.195*** (0.300)	1.541*** (0.556)		2.879*** (0.347)	1.189* (0.699)
EPL_{ct}		0.852*** (0.274)	0.235 (0.374)		1.342*** (0.377)	0.838* (0.457)
BM	-0.401*** (0.028)	-0.401*** (0.028)	-0.472*** (0.036)	-0.428*** (0.033)	-0.435*** (0.029)	-0.505*** (0.032)
NPM	0.433*** (0.000)	0.433*** (0.000)	0.434*** (0.007)	0.239*** (0.000)	0.239*** (0.000)	0.254*** (0.000)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	163,119	163,119	146,289	140,370	140,370	126,616
R-squared	0.203	0.203	0.206	0.137	0.137	0.147

Table 7 (Cont'd)

Panel C: Industry-adjusted one-year sales growth

This table reports results of the least absolute deviation regressions across countries:

$$SGR_{cit+j} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 BM_{cit} + \delta_4 SGR_{cit} + \varepsilon_{cit},$$

where SGR_{cit+j} is the one-year sales growth rate for firm i in country c in year $t+j$ (for $j \in \{1, 2\}$), and then industry adjusted. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPLI$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is firm i 's log book-to-market ratio at the beginning of year t . SGR is the current year's one-year sales growth rate. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered at the country level. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One year ahead			Two years ahead		
BC_{cit}	1.900*** (0.403)	-5.908 (4.681)	-12.040 (9.248)	1.521*** (0.389)	-5.378 (4.207)	-12.939** (6.127)
$BC_{cit} * EPL_{ct}$		0.944* (0.568)	1.021 (1.128)		0.827* (0.502)	2.240*** (0.809)
EPL_{ct}		0.625 (0.798)	-7.094*** (0.846)		0.458 (0.908)	-2.706*** (1.006)
BM	-0.733*** (0.052)	-0.732*** (0.048)	-0.739*** (0.053)	-0.607*** (0.038)	-0.609*** (0.038)	-0.640*** (0.051)
SGR	0.000*** (0.000)	0.000*** (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	161,208	161,208	144,787	138,691	138,691	125,344
R-squared	0.000	0.000	0.000	0.000	0.000	0.000

Table 8
Earnings surprises across countries

This table reports the results of pooled panel regressions across countries:

$$Surprise_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls_{cit} + \varepsilon_{cit}$$

where $Surprise_{cit}$ is the one- or two-year earnings surprise for firm i in country c in year t . The one- (two)-year earnings surprise is the actual earnings per share for the fiscal year ending in year t minus the median I/B/E/S analyst forecast, deflated by the stock price two months prior. The I/B/E/S consensus forecast is taken 8 (20) months prior to the end of the forecast period. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPLI$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. $FirmControls_{cit}$ include BM which is firm i 's log book-to-market ratio and $SIZE$ which is firm i 's log market capitalization, both calculated one-year (two-year) prior for one-year (two-year) earnings surprises. The regression constant is not reported for brevity. Standard errors, given in parentheses, are double clustered by country and year-month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One-year earnings surprises			Two-year earnings surprises		
BC_{cit}	-5.606*** (1.473)	-5.660*** (1.464)	-5.664*** (1.466)	-8.500*** (2.736)	-8.496*** (2.584)	-8.504*** (2.586)
$BC_{cit} * EPL_{ct}$	0.481*** (0.164)	0.509*** (0.164)	0.510*** (0.164)	0.512** (0.244)	0.549** (0.233)	0.551** (0.233)
EPL_{ct}	-0.292 (0.415)	-0.280 (0.434)	-0.283 (0.435)	-0.331 (0.503)	-0.329 (0.521)	-0.337 (0.522)
BM		0.104*** (0.015)	0.106*** (0.014)		0.132*** (0.011)	0.136*** (0.012)
$SIZE$			0.004*** (0.001)			0.008*** (0.000)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	86,739	86,739	86,739	68,693	68,693	68,693
R-squared	0.023	0.028	0.028	0.041	0.046	0.046

Table 9
Stock returns and industry labor mobility

This table reports the results of pooled panel regressions across countries:

$$R_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times EPL_{ct} \times LM_i + \beta_4 BC_{cit} \times LM_i + \beta_5 EPL_{ct} \times LM_i + \delta_1 LM_i + \delta_2 EPL_{ct} + \beta_6 BC_{cit} \times CountryControls_{ct} + \delta_3 CountryControls_{ct} + \delta_4 FirmControls_{cit} + \varepsilon_{cit},$$

where R_{cit} is the return for firm i in month t , either raw, market-adjusted, or industry-adjusted. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to month t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPLI$) described in Table 1, Panel B. LM_i is a dummy variable that equals one if firm i is in the top 15 industries by labor mobility categorized by Donangelo (2014), and zero otherwise; $CountryControls_{ct}$ include the country-level controls described in Table 5. $FirmControls_{cit}$ include the firm-level controls described in Table 4. The regression constant is not reported for brevity. Standard errors, given in parentheses, are double clustered by country and year-month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Raw returns			Market-adjusted returns			Industry-adjusted returns		
BC_{cit}	0.613*** (0.165)	-1.865*** (0.561)	-3.664** (1.629)	0.609*** (0.172)	-2.072*** (0.576)	-3.605** (1.702)	0.575*** (0.154)	-1.735*** (0.520)	-2.493** (1.111)
$BC_{cit} * EPL_{ct}$		0.291*** (0.076)	0.475** (0.229)		0.317*** (0.081)	0.406* (0.227)		0.262*** (0.065)	0.356** (0.173)
$BC_{cit} * EPL_{ct} * LM_i$		0.297 (0.192)	0.602** (0.240)		0.236 (0.207)	0.538** (0.257)		0.317* (0.191)	0.537** (0.227)
$BC_{cit} * LM_i$		-2.418 (1.655)	-5.199** (2.140)		-1.946 (1.790)	-4.645** (2.273)		-2.447 (1.619)	-4.489** (1.992)
$EPL_{ct} * LM_i$		0.089*** (0.018)	0.124*** (0.021)		0.103*** (0.015)	0.129*** (0.014)		0.147** (0.067)	0.188*** (0.068)
LM_i		-0.639** (0.270)	-0.937*** (0.273)		-0.745*** (0.254)	-0.979*** (0.234)		-0.985* (0.557)	-1.329** (0.573)
EPL_{ct}		0.679 (1.122)	-0.011 (0.833)		0.880 (0.958)	0.172 (0.925)		0.696 (1.097)	0.138 (0.769)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes	No	No	Yes

Country Controls	No	No	Yes	No	No	Yes	No	No	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281
R-squared	0.108	0.108	0.111	0.024	0.025	0.026	0.039	0.039	0.041

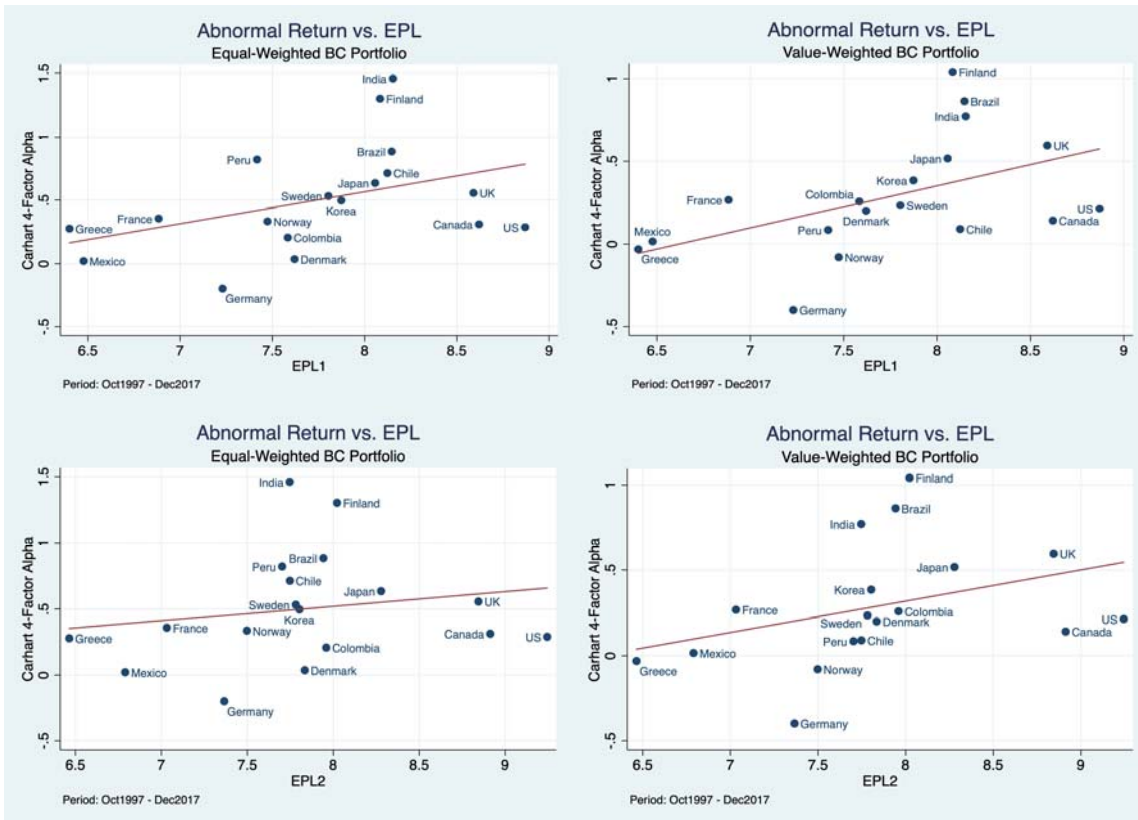


Figure 1. This graph depicts the weighted least squares regression results of the Carhart (1997) 4-factor cross-country alphas on labor market flexibility. The cross-country alphas are obtained from Table 3. *EPL1* and *EPL2* are the two measures of labor market flexibility described in Table 1, Panel B. Their values are chosen at the year before the start of each country’s BC list.

Appendix A

Definition of variables

This appendix describes the calculation of variables used in the core analyses.

Variable	Definition
Main variables	
BC_{cit}	A dummy variable that equals one if firm i has been included in the most recent BC list for country c prior to month t , and zero otherwise
R_{cit}	The return for firm i in month t for country c , either raw, market-adjusted, or industry-adjusted using the Fama and French (1997) 48-industry classification
R_{ct}	The return on an equal-weighted or value-weighted portfolio of listed BCs in month t for country c in excess of the risk-free rate
$EPL1$	10 minus the arithmetic average of EPR (OECD measure of the cost of individual dismissal of workers with regular contracts), EPC (OECD measure of the additional costs for collective dismissals), and EPT (OECD measure of the regulation of temporary contracts) for a given country-year
$EPL2$	10 minus the weighted average of the three above components for a given country-year. The weights are 10/21 for EPR, 4/21 for EPC, and 7/21 for EPT
Firm-level control variables	
$SIZE$	Natural logarithm of firm i 's market capitalization at the end of month $t-2$
BM	Natural logarithm of firm i 's book-to-market ratio at the end of month $t-2$
YLD	A firm i 's dividend yield as measured by total dividends paid over the 12 months prior to month t , divided by share price at the end of month $t-2$
$RET2-3$	Natural logarithm of one plus firm i 's cumulative return over months $t-3$ through $t-2$
$RET4-6$	Natural logarithm of one plus firm i 's cumulative return over months $t-6$ through $t-4$
$RET7-12$	Natural logarithm of one plus firm i 's cumulative return over months $t-12$ through $t-7$
VOL	Natural logarithm of firm i 's dollar trading volume in month $t-2$
PRC	Natural logarithm of firm i 's price at the end of month $t-2$
Country-level control variables	
$RuleofLaw$	The rule of law from La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997)
$GDPg$	GDP growth taken from the World Bank
GDP	GDP per capita taken from the World Bank
$ADRI$	The anti-director rights index corrected by Spamann (2010)
IDV	The Hofstede measure of cultural individualism
$PriceInf$	The efficiency of a firm's stock markets constructed following Fernandes and Ferreira (2009), this is one minus the R-squared of a regression of monthly equity excess returns on value-weighted local market excess returns and US market excess returns
$MktCapGDP$	Stock market capitalization over GDP taken from the World Bank
Other variables and controls	
$Book$	Natural logarithm of book value of assets
ROE	Return on equity as measured by income divided by book equity
$FROE$	Return on equity for the next year. $F2ROE$ ($F3ROE$) measures return on equity two (three) years ahead
ROA	Return on assets as measured by operating income before depreciation divided by book value of assets
NPM	Net profit margin as measured by operating income before depreciation divided by sales
SGR	Sale-growth rate as measured by one-year sales growth rate

Appendix B

Five-factor alpha of BC portfolios and labor market flexibility

This table reports the weighted least squares regression results of cross-country alphas based on portfolios of Best Companies using Fama and French's (2017) five-factor model, where the weights are the inverse of the squared standard errors of the alpha estimates. Both alphas and their standard errors are from Table 3 Panel A and Panel B. *EPL1* and *EPL2* are the two measures of employment protection legislation described in Table 1, Panel B. Their values are chosen at the year before the start of each country's BC list.

	<i>EPL1</i>		<i>EPL2</i>	
	Alpha (EW)	Alpha (VW)	Alpha (EW)	Alpha (VW)
<i>EPL</i>	0.306** (0.134)	0.388** (0.133)	0.178 (0.115)	0.311** (0.113)
<i>Constant</i>	-1.906* (0.978)	-2.653** (0.975)	-0.959 (0.769)	-2.107** (0.800)
Observations	18	18	18	18
R-squared	0.20	0.38	0.07	0.23

Appendix C
Operating performance across countries based on EPL2

Panel A: Industry-adjusted return on assets

This table reports results of the least absolute deviation regressions across countries:

$$ROA_{cit+j} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 BM_{cit} + \delta_4 ROA_{cit} + \varepsilon_{cit},$$

where ROA_{cit+j} is the return on assets calculated as operating income before depreciation divided by book value of assets for firm i in country c in year $t+j$ (for $j \in \{1, 2\}$), and then adjusted by subtracting the industry median. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPL2$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is firm i 's log book-to-market ratio at the beginning of year t . ROA is the current year's return on assets. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered at the country level. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One year ahead			Two years ahead		
BC_{cit}	1.801*** (0.169)	-7.735*** (1.083)	-8.056*** (1.827)	1.485*** (0.144)	-8.463*** (0.993)	-5.830** (2.794)
$BC_{cit} * EPL_{ct}$		1.121*** (0.134)	1.089*** (0.223)		1.188*** (0.123)	0.765** (0.364)
EPL_{ct}		0.287* (0.147)	-0.515*** (0.180)		0.849*** (0.162)	-0.031 (0.198)
BM	-0.301*** (0.022)	-0.303*** (0.022)	-0.349*** (0.021)	-0.198*** (0.016)	-0.198*** (0.018)	-0.230*** (0.020)
ROA	0.219*** (0.024)	0.219*** (0.021)	0.198*** (0.015)	0.206*** (0.024)	0.206*** (0.024)	0.187*** (0.019)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	171,043	171,043	153,465	146,814	146,814	132,448
R-squared	0.041	0.041	0.040	0.027	0.028	0.026

Appendix C (Cont'd)

Panel B: Industry-adjusted net profit margin

This table reports results of the least absolute deviation regressions across countries:

$$NPM_{cit+j} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 BM_{cit} + \delta_4 NPM_{cit} + \varepsilon_{cit},$$

where NPM_{cit+j} is the net profit margin calculated as operating income before depreciation divided by sales for firm i in country c in year $t+j$ (for $j \in \{1, 2\}$), and then industry adjusted. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPL2$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is firm i 's log book-to-market ratio at the beginning of year t . NPM is the current year's net profit margin. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered at the country level. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One year ahead			Two years ahead		
BC_{cit}	2.356*** (0.259)	-13.636*** (2.682)	-12.532*** (4.417)	3.384*** (0.372)	-18.530*** (2.421)	-13.538** (6.844)
$BC_{cit} * EPL_{ct}$		1.871*** (0.319)	1.456*** (0.491)		2.536*** (0.287)	1.192* (0.689)
EPL_{ct}		0.925*** (0.264)	0.548 (0.387)		1.455*** (0.365)	1.087** (0.452)
BM	-0.401*** (0.028)	-0.401*** (0.028)	-0.471*** (0.037)	-0.428*** (0.033)	-0.437*** (0.028)	-0.505*** (0.032)
NPM	0.433*** (0.000)	0.433*** (0.000)	0.434*** (0.007)	0.239*** (0.000)	0.239*** (0.000)	0.254*** (0.000)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	163,119	163,119	146,289	140,370	140,370	126,616
R-squared	0.203	0.203	0.206	0.137	0.137	0.147

Appendix C (Cont'd)

Panel C: Industry-adjusted one-year sales growth

This table reports results of the least absolute deviation regressions across countries:

$$SGR_{cit+j} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 BM_{cit} + \delta_4 SGR_{cit} + \varepsilon_{cit},$$

where SGR_{cit+j} is the one-year sales growth rate for firm i in country c in year $t+j$ (for $j \in \{1, 2\}$), and then industry adjusted. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility ($EPL2$) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is firm i 's log book-to-market ratio at the beginning of year t . SGR is the current year's one-year sales growth rate. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered at the country level. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One year ahead			Two years ahead		
BC_{cit}	1.900*** (0.403)	-4.707 (4.250)	-12.764 (9.940)	1.521*** (0.389)	-4.917 (3.935)	-11.919* (6.997)
$BC_{cit} * EPL_{ct}$		0.776 (0.501)	1.030 (1.226)		0.746 (0.454)	2.103** (0.837)
EPL_{ct}		0.959 (0.731)	-6.962*** (0.791)		0.030 (0.809)	-3.507*** (1.052)
BM	-0.733*** (0.052)	-0.733*** (0.048)	-0.736*** (0.052)	-0.607*** (0.038)	-0.608*** (0.038)	-0.641*** (0.049)
SGR	0.000*** (0.000)	0.000*** (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	161,208	161,208	144,787	138,691	138,691	125,344
R-squared	0.000	0.000	0.000	0.000	0.000	0.000

Appendix D

Earnings surprises across countries based on *EPL2*

This table reports the results of pooled panel regressions across countries:

$$Surprise_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 EPL_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls_{3cit} + \varepsilon_{cit}$$

where $Surprise_{cit}$ is the one- or two-year earnings surprise for firm i in country c in year t . The one- (two)-year earnings surprise is the actual earnings per share for the fiscal year ending in year t minus the median I/B/E/S analyst forecast, deflated by the stock price two months prior. The I/B/E/S consensus forecast is taken 8 (20) months prior to the end of the forecast period. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to year t , and zero otherwise. EPL_{ct} is labor market flexibility (*EPL2*) described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. $FirmControls_{3cit}$ include BM which is firm i 's log book-to-market ratio and $SIZE$ which is firm i 's log market capitalization, both calculated one-year (two-year) prior for one-year (two-year) earnings surprises. The regression constant is not reported for brevity. Standard errors, given in parentheses, are double clustered by country and year-month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)
	One-year earnings surprises			Two-year earnings surprises		
BC_{cit}	-5.296*** (1.651)	-5.300*** (1.648)	-5.303*** (1.651)	-8.139*** (2.970)	-8.082*** (2.820)	-8.088*** (2.823)
$BC_{cit} * EPL_{ct}$	0.436** (0.180)	0.456** (0.183)	0.457** (0.183)	0.470* (0.262)	0.500** (0.252)	0.502** (0.252)
EPL_{ct}	-0.415 (0.424)	-0.407 (0.444)	-0.410 (0.445)	-0.657 (0.477)	-0.662 (0.495)	-0.670 (0.497)
BM		0.104*** (0.015)	0.106*** (0.014)		0.132*** (0.011)	0.136*** (0.012)
$SIZE$			0.004*** (0.001)			0.008*** (0.000)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes
Country Controls	No	No	Yes	No	No	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	86,739	86,739	86,739	68,693	68,693	68,693
R-squared	0.023	0.028	0.028	0.041	0.046	0.046

Appendix E

Stock returns and industry labor mobility based on *EPL2*

This table reports the results of pooled panel regressions across countries:

$$R_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times EPL_{ct} + \beta_3 BC_{cit} \times EPL_{ct} \times LM_i + \beta_4 BC_{cit} \times LM_i + \beta_5 EPL_{ct} \times LM_i + \delta_1 LM_i + \delta_2 EPL_{ct} + \beta_6 BC_{cit} \times CountryControls_{ct} + \delta_3 CountryControls_{ct} + \delta_4 FirmControls_{cit} + \varepsilon_{cit},$$

where R_{cit} is the return for firm i in month t , either raw, market-adjusted, or industry-adjusted. BC_{cit} is a dummy variable that equals one if firm i has been included in the most recent BC list in country c prior to month t , and zero otherwise. EPL_{ct} is labor market flexibility (*EPL2*) described in Table 1, Panel B. LM_i is a dummy variable that equals one if firm i is in the top 15 industries by labor mobility categorized by Donangelo (2014), and zero otherwise; $CountryControls_{ct}$ include the country-level controls described in Table 5. $FirmControls_{cit}$ include the firm-level controls described in Table 4. The regression constant is not reported for brevity. Standard errors, given in parentheses, are double clustered by country and year-month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is October 1997 to December 2017.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Raw returns			Market-adjusted returns			Industry-adjusted returns		
BC_{cit}	0.613*** (0.165)	-2.129** (0.879)	-3.420** (1.715)	0.609*** (0.172)	-2.157*** (0.764)	-3.557** (1.768)	0.575*** (0.154)	-1.999** (0.779)	-2.244* (1.342)
$BC_{cit} * EPL_{ct}$		0.315*** (0.114)	0.442* (0.246)		0.319*** (0.104)	0.403* (0.239)		0.287*** (0.098)	0.324 (0.207)
$BC_{cit} * EPL_{ct} * LM_i$		0.078 (0.189)	0.321 (0.263)		0.027 (0.197)	0.266 (0.257)		0.110 (0.168)	0.294 (0.225)
$BC_{cit} * LM_i$		-0.595 (1.728)	-2.883 (2.438)		-0.188 (1.788)	-2.398 (2.381)		-0.730 (1.529)	-2.492 (2.081)
$EPL_{ct} * LM_i$		0.107** (0.045)	0.134*** (0.038)		0.120*** (0.044)	0.140*** (0.036)		0.160** (0.064)	0.192*** (0.062)
LM_i		-0.806* (0.458)	-1.051*** (0.399)		-0.903** (0.450)	-1.103*** (0.387)		-1.129** (0.567)	-1.404** (0.549)
EPL_{ct}		0.869 (1.195)	0.004 (0.880)		0.822 (0.853)	-0.019 (0.909)		0.899 (1.185)	0.198 (0.813)
$BC * Country\ Controls$	No	No	Yes	No	No	Yes	No	No	Yes

Country Controls	No	No	Yes	No	No	Yes	No	No	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281	2,741,282	2,741,282	2,442,281
R-squared	0.108	0.108	0.111	0.024	0.025	0.026	0.039	0.039	0.041

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities*.

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

ECGI Working Paper Series in Finance

Editorial Board

Editor	Mike Burkart, Professor of Finance, London School of Economics and Political Science
Consulting Editors	Franklin Allen, Nippon Life Professor of Finance, Professor of Economics, The Wharton School of the University of Pennsylvania Julian Franks, Professor of Finance, London Business School Marco Pagano, Professor of Economics, Facoltà di Economia Università di Napoli Federico II Xavier Vives, Professor of Economics and Financial Management, IESE Business School, University of Navarra Luigi Zingales, Robert C. McCormack Professor of Entrepreneurship and Finance, University of Chicago, Booth School of Business
Editorial Assistant	Úna Daly, ECGI Working Paper Series Manager

Electronic Access to the Working Paper Series

The full set of ECGI working papers can be accessed through the Institute's Web-site (<https://ecgi.global/content/working-papers>) or SSRN:

Finance Paper Series	http://www.ssrn.com/link/ECGI-Fin.html
-----------------------------	---

Law Paper Series	http://www.ssrn.com/link/ECGI-Law.html
-------------------------	---

<https://ecgi.global/content/working-papers>