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

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Abstract

We study the relationship between employee satisfaction and firm performance around the world, using lists of the "Best Companies to Work For" in 14 countries. Employee satisfaction is associated with superior long-run returns, current valuation ratios, future profitability, and earnings surprises in flexible labor markets, such as the US and UK, but not rigid labor markets, such as Germany. 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. In rigid labor markets, legislation already provides minimum standards for worker welfare and so additional expenditure may exhibit diminishing returns. 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.

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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 or harmful to firm value. On the one hand, it can be a valuable tool for recruitment, retention, and motivation. For the typical 20th-century firm, the bulk of its value stemmed from its physical capital. In contrast, most modern firms' key assets are their workers – not only senior management, but also rank-and-file employees. For example, in knowledge-based industries such as software, pharmaceuticals, and financial services, non-managerial employees engage in product innovation, build relationships with customers and suppliers, and mentor subordinates. Employee-friendly policies can attract and retain high-quality workers skilled at these tasks.

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] These motivational benefits may be particularly important for rank-and-file employees, who are harder to incentivize with equity than executives, due to their small individual effect on firm value.

On the other hand, employee satisfaction can represent wasteful expenditure by management. Taylor (1911) argues that workers should be treated like any 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.

[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 Hertzberg (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 relative importance of the above costs and benefits depends on the institutional context. In flexible labor markets, firms face fewer restrictions on the contracts they can offer. When hiring constraints are weaker, the recruitment benefits of employee satisfaction are stronger. Since one's rivals also face few hiring constraints, retention motives are also more important. Flexible labor markets also feature fewer firing constraints. Since it is easier for firms to replace underperforming workers, the recruitment benefits are again larger. In addition, the greater firing risk in flexible labor markets encourages employees to invest in general rather than firm-specific skills (Thelen (2001)), which increases their ability to be recruited elsewhere. Separately, the motivational benefits are also likely higher. The motivation to work hard to avoid being fired from a satisfying job (Shapiro and Stiglitz (1984)) is stronger if firing is more likely.

In rigid labor markets, hiring and firing are harder, and thus the recruitment, retention, and motivational benefits are lower. In addition, expenditure on employee satisfaction likely exhibits diminishing marginal returns. When regulations already ensure a minimum level of worker welfare, companies with high satisfaction relative to their peers may be exceeding the optimal level.

Testing the link between employee satisfaction and firm performance is challenging, because causality may run from the latter to the former. Edmans (2011, 2012) addresses this challenge by using stock returns (rather than, say, accounting 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.[2] Thus, firms with high employee satisfaction should not outperform going forwards. In contrast, he finds that the "100 Best Companies to Work For in America" subsequently beat their peers by 2-3% per year over a 26-year period. These results suggest that employee satisfaction has value but is not immediately

[2] There is evidence that even tangible information may not immediately be incorporated into stock prices, e.g. the literature on post-earnings announcement drift. We thus control for momentum.

capitalized by the market, consistent with prior evidence on the mispricing of intangibles discussed in Section 1. However, these papers only study the US – a country with particularly flexible labor 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 14 countries, and investigate how this relationship depends on the country's level of labor market flexibility. The US Best Companies ("BC") list is produced by the Great Place to Work® Institute. The Institute produces similar lists in 44 other countries, of which 15 have at least 10 BCs publicly traded in the domestic market. We measure country-level labor market flexibility using the OECD Employment Protection Legislation index, also used by Pagano and Volpin (2005b) and Simintzi, Vig, and Volpin (2015), which is available for 14 of these 15 countries.

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 34 basis points in the US from 1998-2013, starting from the month after list publication. This alpha is only the 10th highest out of the 14 countries. For example, it is 0.77% in Japan from 2007-2013 and (an insignificant) 0.81% in the UK from 2001-2013.[3] However, we also document sizable heterogeneity across countries. For example, Germany exhibits an insignificantly negative alpha of -0.45%. Thus, while prior results generally hold out of sample, they do not extend to every country.

We next show that the abnormal returns to the BCs are higher in flexible labor markets. As a preliminary analysis, we first show that country-level equal- and value-weighted alphas are both significantly increasing in labor market flexibility, using both ordinary and weighted least squares regressions. Our main analysis is 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

[3] The different time periods reflect the different years in which the BC list was initiated.

identified by Brennan, Chordia, and Subrahmanyam (1998), such as size, book-to-market, dividend yield, past returns, trading volume, and the stock price. To ensure that labor market flexibility is not simply proxying for other differences between countries, we control for interactions between BC status and other country-level variables such as the rule of law (La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997)), the anti-director rights index (Spamann (2010)), Hofstede's (1980) measure of cultural individualism, and GDP growth. Since abnormal returns to the BCs depend not only on the value (if any) of satisfaction but also the extent to which it is not priced by the market, we also control for the country-level price efficiency measure of Fernandes and Ferreira (2009). We use GDP per capita and the ratio of stock market capitalization to GDP to proxy for the development of a country's economy and stock market, which may also be related to market efficiency.

We find that a one standard deviation increase in labor market flexibility is associated with a 0.64% 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 high labor market flexibility.

However, our stock return results admit alternative explanations. First, the high stock returns of BCs in flexible labor markets could represent compensation for risk, perhaps because employee satisfaction is worth little upon bankruptcy. This explanation is difficult to reconcile with the sheer magnitude of the excess returns in certain countries, as well as their negativity in others, but further analyses can be conducted. 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.

We conduct additional tests to address these alternative explanations. 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 value-destructive – 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, particularly in flexible labor markets. These results are consistent with Edmans (2011) who finds that the US BCs trade at an initial premium, and also with the market at least partially impounding the (positive or negative) value of employee satisfaction upon list publication.

To further distinguish between whether the returns to BCs arise from risk or employee satisfaction having (positive or negative) value that the market misprices, we study future accounting performance. We find that the BCs enjoy return on assets that are 3.7 (2.8) percentage points higher than their peers one year (two years) after list inclusion. These effects are stronger in countries with flexible labor markets. A one standard deviation increase in labor market flexibility is associated with BCs having a next-year return on assets that is 1.23 percentage points higher. We find similar results for the net profit margin and sales growth.

Finally, superior future accounting performance should only manifest in higher stock returns to the extent to which it was unanticipated by the market. We find that the BCs exhibit significantly higher earnings surprises than peer firms in flexible labor markets, but not in rigid labor markets. A one standard deviation increase in labor market flexibility is associated the BCs enjoying a 0.16% (0.50%) higher earnings surprise one year (two years) ahead, significant at the 5% level.

This paper contributes to a number of literatures. The first is the link between employee satisfaction and firm performance, e.g. Abowd (1989), Diltz (1995), Dhrymes (1998), and Edmans

(2011, 2012). These studies only analyze the US. Given the importance of labor market institutions, it is unclear whether their results generalize more widely. In addition to generalizing the original US results on the Best Companies, our finding that the abnormal returns are sometimes negative provide further evidence that the US results were unlikely due to a missing risk factor.

Second, 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. Hamilton, Jo and Statman (1993), Kurtz and DiBartolomeo (1996), Guerard (1997), Bauer, Koedijk, and Otten (2005), Schröder (2007), and Statman and Glushkov (2009) find no or a mixed effect of SRI screens on investment returns; Geczy, Stambaugh, and Levin (2005), Brammer, Brooks, and Pavelin (2006), Renneboog, Ter Horst, and Zhang (2008), and Hong and Kacperczyk (2009) find a negative effect; and Derwall et al. (2005), Fornell et al. (2006), Edmans (2011, 2012), and Eccles, Ioannou, and Serafeim (2014) find a positive one. Relatedly, Dimson, Karakas, and Li (2013), Flammer (2013), Servaes and Tamayo (2013), and Krüger (2015) find evidence that corporate social responsibility positively impacts shareholder value. Nearly all of these studies use US data and their generalizability is again unclear. In particular, 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.

Finally, this paper adds to the literature comparing the performance of investment strategies across countries. Asness, Moskowitz, and Pedersen (2013) find that value strategies are profitable not only in the US, but also in the UK, Europe, and Japan. Momentum strategies are profitable in the first three regions, but not Japan. Chui, Titman, and Wei (2010) find that momentum profits within a country are increasing in the individualism of its national culture.

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 be capitalized by the market before the start of the return compounding window.

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 (2011), 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.

We now discuss why this value might depend on a country's labor market flexibility. Employee satisfaction has both benefits and costs. Starting with the benefits, worker welfare is likely to improve recruitment, retention, and motivation. For the reasons discussed in the introduction, these benefits are likely to be particularly strong in flexible labor markets, in which hiring and firing are easier. Thus, in such countries, we hypothesize that employee satisfaction is a value-creating investment.

However, as with any investment, the returns are likely decreasing. In rigid labor markets, regulations already impose a floor on worker welfare, leading to a downward movement along the marginal benefit curve. In addition, due to the restrictions on hiring and firing, labor mobility is less

frequent and so the benefits are likely smaller, causing a downward shift in the marginal benefit curve. Both of these forces reduce the marginal benefit of further expenditure on worker welfare, potentially below its marginal cost. Indeed, a manager may spend excessively on employee satisfaction due to an agency problem. He may enjoy more pleasant relationships with his subordinates by overpaying them (Jensen and Meckling (1976)). Pagano and Volpin (2005a) argue that employee benefits such as high wages can be used as a takeover defense. 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. Gorton and Schmid (2004) find that, when labor has a voice in corporate governance, profitability and valuation are lower. Chen, Kacperczyk, and Ortiz-Molina (2011) hypothesize that labor unions protect wages in a downturn, and find that they increase a firm's operating leverage and cost of equity. Unions also protect underperforming managers and reduce firm value (Atanassov and Kim (2009), Lee and Mas (2012)).

As a result, we predict that the BCs generate positive abnormal returns in countries with high labor market flexibility, and that the returns to list inclusion decrease with labor market rigidity.

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 57-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, diversity), and pride/camaraderie (teamwork, philanthropy, celebrations), and the top firms are publicly announced in rank order. 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.

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 and thus does not need independent verification, 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 of these 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 months for the US). Jenter, Lewellen, and Warner (2011) show that managers' private information is confined to the next 100 days; managers have little predictive ability for returns over days 100–150. Moreover, if managers have long-lived private information and those who foresee negative returns are particularly likely to apply (as they believe list inclusion will bolster their stock price), this will bias the results downwards.

We include countries with more than five years' history of BC listings, and exclude those where firm-level stock return and accounting data are unavailable, e.g. Colombia, Ecuador, Uruguay, and Venezuela. For each country, we only include BCs that are both headquartered and publicly 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 14 countries that have data on labor market flexibility (which we will describe in Section 2.2) and where at least 10 BCs are headquartered and publicly listed. Column (1) shows the start year of BC listings for each country. The numbers of public BCs per country are reported in column (3). Since the earliest start year for a non-US country is 1997 (for Brazil), our sample period is from September 1997 to December 2013. 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 are joint tests of the value of employee satisfaction and the extent to which this value is 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.

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 2013 it contains 100. Column (6) of Table 1 indicates the number of BCs selected in the initial list and the 2013 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 (7) lists the current publisher for the list in each country; in nearly all cases it is a major newspaper or magazine.[4]

[4] 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.

2.2. Measures of labor market flexibility

Our measure of labor market flexibility is the OECD's Employment Protection Legislation ("EPL") index, also used in Blanchard and Portugal (2000), Messina and Vallanti (2007), Pagano and Volpin (2005b), and Simintzi, Vig, and Volpin (2015). 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 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 also its recruitment benefits (since the ease of firing raises the number of vacancies the firm can create). The third measure captures

constraints on hiring, which reduce the recruitment benefits of satisfaction. Separately, regulations on hiring and firing impose a minimum level of satisfaction, leading to a downward movement along the marginal benefit curve for expenditure on employee satisfaction. Thus, in rigid labor markets, firms with high satisfaction relative to their peers may be operating in the region in which the marginal benefit does not justify the cost.

We calculate *LMF* as the 10 minus the average of the three sub-indicators' scores,[5] so that a high *LMF* score implies high labor market flexibility. Columns (1)-(4) of Table 1, Panel B reports the time series mean of *LMF* and each sub-index for each country from 1997-2013. As a rough check that *LMF* is linked to labor mobility, we were able to collect data on labor turnover rates for seven countries in our sample from OECD (1996).[6] Over our sample period, their correlation with the time series mean of *LMF* is 0.73. Similarly, Messina and Vallanti (2007) and the OECD (2013) show that *LMF* is negatively associated with labor turnover.

3. Results

3.1. Country-level alphas

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

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

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)).

[5] The OECD reports *LMF* as a weighted average of the three broad categories, where the weights depend on the number of sub-indicators in each group. Our results are robust to this weighted measure of *LMF*.
[6] Labor turnover measures changes in individuals between jobs, regardless of whether the jobs themselves are newly created, ongoing (and subsequently filled by others) or disappear, as a fraction of total employment.

We use dollar returns, consistent with the literature on international asset pricing (e.g. Fama and French (2015), Griffin (2002), and Hou, Karolyi, and Kho (2011)) and also because the Fama and French (2012) factors, described shortly, are in dollars. Stock returns are taken from the Center for Research in Security Prices ("CRSP") for US firms and Datastream for other firms. Both active and inactive firms are included to avoid survivorship bias. We winsorize stock returns at the 0.5% and 99.5% level in each country; results are very similar without winsorization.

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 Kenneth French's website. We use the Europe factors for all European countries, the North American factors for Brazil, Chile, Canada and the US, the Japan factors for Japan, and the Asia-Pacific Excluding Japan factors for Korea and India.

ε is an error term. Standard errors are corrected for heteroscedasticity and autocorrelation using Newey-West's (1987) estimator with four lags.

Panel A of Table 2 reports results for equal-weighted portfolios. Three of the 14 countries (Denmark, Germany, and Greece) have insignificantly negative alphas. The remaining 11 countries have positive alphas, which are significant at the 10% level or better for Chile, Japan, Sweden, and the US. In terms of economic significance, the US has the 10th highest alpha out of the 14 countries, suggesting that it is not an outlier. Panel B of Table 2 reports results for value-weighted portfolios. Denmark, France, Germany, and Greece have negative alphas, with Denmark's being significant at the 10% level. The alphas for Chile and the UK are significantly positive at the 10% level or better.

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, i.e. in excess of the local country market return.[7] The local market return is the MSCI stock market index for each country, from Datastream. The third is the industry-adjusted return, where the industry return is the median return among non-BC firms in the same industry and same 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 month fixed effects to control for macroeconomic conditions that may affect stock returns in a given month. Standard errors are clustered by firm.

[7] Results are similar using the abnormal return (AR_{cit}) for firm i in country c and month t as the dependent variable. AR_{cit} is calculated as the CAPM-adjusted abnormal return using either a 5- or 3-year rolling-window beta.

The results are presented in Table 3; we only present the coefficient on the *BC* dummy for brevity. For raw returns, it is significantly positive for Canada, Chile, India, Japan, Korea, and the US.[8] For example, in the US, being a BC is associated with an additional monthly return of 36 basis points. Denmark, Finland, France, Germany, and Sweden have negative coefficients on the *BC* dummy; the coefficient is only significant in Denmark.

4. The role of labor market flexibility

This section examines how the relationship between employee satisfaction and stock returns depends on the degree of labor market flexibility. As a preliminary analysis, Table 4 reports a cross-sectional regression of the country-level four-factor alpha from equation (1) on a country's average *LMF* measure. Panel A reports an ordinary least squares ("OLS") regression; to address the different number of observations, and thus precision of alpha estimates, across countries, Panel B reports a weighted least squares ("WLS") regression where the weights are the standard errors of alpha estimates from Table 2. Both methods show that both the equal- and value-weighted abnormal returns to a BC portfolio are significantly increasing in a country's labor market flexibility, at at least the 10% level. For example, using WLS, a one standard deviation increase in *LMF* is associated with a 0.38% (0.47%) higher equal-weighted (value-weighted) monthly alpha, significant at the 5% (1%) level. Figure 1 plots a scatter graph of equal- and value-weighted monthly alphas on *LMF* by country.

Holderness (2016a, 2016b) argues that international empirical analyses should be conducted at the firm level, rather than at the country level, as the latter approach ignores between-firm, within-country variation. In our context, the country-level regressions of Table 4 will ignore other firm-specific determinants of stock returns. Our main analysis thus studies the impact of labor market

[8] The coefficient on the *BC* dummy in Canada is very high (e.g. 210 basis points for raw returns). We have re-run the cross-county analyses that follow excluding Canada for robustness. The results are very similar, since the Canada data is only available for a short time period.

flexibility using firm-level analyses that take into account firm characteristics. In addition to firm-level controls, a firm-level analysis also allows us to add country-level controls; we are unable to do so in the cross-country regression of Table 4 as we only have 14 observations. Specifically, 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:

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

To ensure that *LMF* is not simply proxying for other country-level differences, we include $CountryControls_{ct}$, a vector of other country-level control variables, which we now list. $RuleofLaw_c$ 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) find that profits to another trading strategy (momentum) 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.[9] Since the returns to Best Companies 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. (Note that the control for firm size may also proxy for arbitrage costs and

[9] Following Fernandes and Ferreira (2009), our sample screening criteria in the calculation are: 1) excluding firms with negative sales in a particular year; 2) excluding firms with total assets of under $100 million; and 3) requiring stock returns data in Datastream in every month of a given year.

investor sophistication (Lakonishok, Shleifer, and Vishny (1994)). Based on similar motivation, 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, which 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* due to the presence of country fixed effects) and also interacted with *BC*, to ensure that any significance of the *BC*LMF* interaction does not simply arise because *LMF* proxies for another country-level variable that is causing cross-country differences in the returns to the BCs. We include 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 month level as it is the most conservative specification; the results remain robust to double-clustering at the firm and month level.

Table 5 presents the results. 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 0.74, which is significant at the 1% level. However, in column (3) when interactions with *LMF* and the country controls are added, the coefficient on *BC* becomes significantly negative, but the coefficient on *BC*LMF* is significantly positive at the 1% 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*LMF* being 0.94 (1.09) for market-adjusted (industry-adjusted) returns. A one standard deviation increase in *LMF* is associated with a 0.55% (0.64%) increase in the monthly market-adjusted (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. The sheer magnitude of the positive excess returns in some countries, documented in Table 2, seems difficult to fully explain by risk, as do the negative returns in others, 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.[10]

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 effect of being a Best Company on industry-adjusted Tobin's Q by running the following regression:

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

[10] A third channel is that list inclusion attracts demand from socially responsible investors, leading to upward 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.

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, 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, and winsorized at the 0.5% and 99.5% level in each country. The industry adjustment is conducted by subtracting the median Q across all non-BC firms in the same industry in country *c* and year *t*. *FirmControls2* is a vector of firm controls: *BM* is the log of firm *i*'s book-to-market ratio, *LBVA* 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). The country-level controls are defined as in Table 5. We include country and month fixed effects, and double-cluster standard errors at the country and month level.[11]

The results in Table 6 show that, without country controls or *LMF*, the Best Companies enjoy Tobin's Qs that are 0.84 units higher at the start of the return compounding window; the magnitude is consistent with Edmans (2011). Moreover, these Qs are particularly high in flexible labor markets. When the *BC*LMF* interactions are included, they are significant at the 5% level or better (both with and without country controls), but the coefficient on *BC* as a standalone becomes either insignificant or significantly negative, suggesting that the Best Companies are *only* associated with higher Qs in flexible labor markets. With country fixed effects and country controls, a one standard deviation increase in the *LMF* measure is associated with BCs having a 0.10 unit higher Q. These results are inconsistent with the alternative explanation that the superior returns to the Best Companies in flexible labor markets result from them initially trading at a discount. In contrast, they are consistent with the

[11] The fixed effects and clustering are at the month (rather than year) level, because the month following list publication differs across countries.

hypothesis that employee satisfaction is valuable, particularly in flexible labor markets, and the market partially incorporates its value upon list publication.

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

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

$Perf_{cit+j}$ 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).[12] NPM_{cit+j} is the industry-adjusted net profit margin, calculated as operating income before depreciation divided by sales following Jacobson (1987). SG_{cit+j} is the industry-adjusted sales growth, calculated as the ratio of sales in year $t+j$ to year t. Following Gompers, Ishii, and Metrick (2003), we include BM_{cit} as a firm-level control. The country-level controls are defined as in Section 4. We winsorize operating performance at the 0.5% and 99.5% level in each country and include country and year fixed effects. Also as in Gompers, Ishii, and Metrick (2003), we run least absolute deviation regressions to mitigate the effect of large outliers. Standard errors are robust to heteroscedasticity and misspecification (Angrist, Chernozhukov, and Fernández-Val (2006)), and clustered at the country level.[13]

[12] The results remain significant when replacing operating income before depreciation by net income.

[13] We use the Stata "qreg2" command which 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.

The results are shown in Table 7. The BCs enjoy return on asset ratios that are 3.7 (2.8) percentage points higher than their peers one year (two years) after list inclusion.[14] When the *BC*LMF* interactions are added, they are significant at the 1% level, both with and without country controls; the coefficient on *BC* alone either becomes insignificant or significantly negative. A one standard deviation increase in the *LMF* measure is associated with BCs having a next-year return on assets that is 1.23 percentage points higher. We find similar results using net profit margin and sales growth as the dependent variable. Out of the 12 specifications (with and without controls, for *ROA*, *NPM*, and *SG* as the performance measure, and studying performance one or two years ahead), 10 of the *BC*LMF* interaction terms are significant at the 1% level, and one 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:

$$Surprise_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times LMF_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 LMF_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls3_{cit} + \varepsilon_{cit}, \quad (6)$$

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

[14] As benchmarks 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 14 countries, we obtain 7.0% (10.3%). Thus, the 3.7% higher return on assets of the BCs appear plausible.

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), Lim (2001), Teoh and Wong (2002), 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 month fixed effects.

Table 8 illustrates the results. Columns (1)-(3) show that the BCs enjoy significantly higher one-year earnings surprises in flexible labor markets: the coefficient on *BC*LMF* is significant at the 1% level in columns (1), and at the 5% level in column (2) and (3) which include either one or both firm controls. 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 *LMF* measure is associated with a 0.16% (0.50%) increase in the one-year (two-year) earnings surprise.

Overall, our results suggest that companies with high employee satisfaction exhibit higher future stock returns, current valuation ratios, future operating performance, and future 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 reflects wasteful expenditure in countries with rigid labor markets.

6. Conclusions

This paper studies how the relationship between employee satisfaction and stock returns depends critically on the level of 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 – being listed as a Best Company to Work For is associated with superior returns only in countries with high labor market flexibility. We find similar results for current valuation ratios, three measures of future operating performance, and future earnings surprises – these are higher for the Best Companies, but only in countries with flexible labor markets.

Our findings are consistent with the recruitment, retention, and motivational benefits of employee satisfaction being most valuable in countries in which firms face fewer constraints on hiring and firing. 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. 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.

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Table 1
Summary statistics

Panel A: Publicly-listed Best Companies to Work For

Panel A reports the list of countries in which at least ten publicly-listed Best Companies (BCs) are headquartered and publicly listed. Column (1) presents the years of BC lists that we use for each country. Column (2) reports our portfolio formation date for each country. Column (3) gives the number of listed BC per country. Column (4) presents the total number of listed firms in each country including BCs. Column (5) records the total number of firm-month observations for each country. Column (6) indicates for each country the number of BCs in the year the list was initiated and also in 2013. Column (7) shows the current publication outlet for each country. The sample period is September 1997 to December 2013.

	(1)	(2)	(3)	(4)	(5)	(6)		(7)
	Listing years	**Formation date**	**Total no. of public BCs**	**Total no. of firms**	**Total no. of obs.**	**Size of BC lists**		**Current Publication Outlet**
						Initial	**2013**	
Brazil	1997-2013	01-Sep	70	652	30,883	50	100	Época
Canada	2006-2013	01-May	15	4,405	172,724	30	50	The Globe and Mail
Chile	2001-2013	01-Dec	11	304	22,050	25	50	El Mercurio
Denmark	2001-2013	01-Dec	23	461	26,960	50	75	GPTW Europe
Finland	2003-2013	01-Mar	14	241	19,448	20	50	Talouselämä
France	2002-2013	01-Apr	18	1,765	92,813	25	49	Le Figaro
Germany	2003-2013	01-Mar	24	1,646	84,252	50	100	Handelsblatt
Greece	2003-2013	01-May	12	443	39,570	10	25	To Vima
India	2003-2013	01-Jun	46	2,578	131,432	25	100	The Economic Times
Japan	2007-2013	01-Apr	38	4,981	510,977	20	40	Nikkei Business
Korea	2002-2013	01-Nov	49	2,019	128,687	20	100	The Korea Economic Daily
Sweden	2003-2013	01-Apr	11	823	44,418	25	38	GPTW Sweden
UK	2001-2013	01-May	33	4,943	199,276	50	50	The Guardian
US	1998-2013	01-Feb	188	11,478	1,209,671	100	100	Fortune
All	–	–	552	39,239	2,713,161	500	927	–

Table 1 (Cont'd)

Panel B: Labor market flexibility

Panel B summarizes the employment protection legislation (EPL) indicator from OECD. Column (1) presents the time-series average of EPL for each country, which, for a given country-year, is the average of three components: individual dismissal of workers with regular contracts (EPR), additional costs for collective dismissals (EPC), and regulation of temporary contracts (EPT). Columns (2)-(4) gives the time-series average of these individual components. Columns (5) presents our labor market flexibility (*LMF*) measure, which is equal to 10 minus EPL in Column (1).

	(1)	**(2)**	**(3)**	**(4)**	**(5)**
	EPL	**Individual dismissals (regular contracts)**	**Collective dismissals (additional costs)**	**Temporary contracts**	***LMF***
		EPR	**EPC**	**EPT**	
Brazil	2.159	1.452	0.900	4.125	7.841
Canada	1.38	0.921	2.969	0.250	8.620
Chile	1.876	2.627	0.000	3.000	8.124
Denmark	2.257	2.147	3.250	1.375	7.743
Finland	1.849	2.203	1.781	1.563	8.151
France	3.134	2.402	3.375	3.625	6.866
Germany	2.591	2.798	3.625	1.352	7.409
Greece	3.117	2.680	3.250	3.422	6.883
India	1.846	3.286	0.438	1.813	8.154
Japan	1.92	1.556	3.250	0.953	8.080
Korea	2.144	2.369	1.875	2.188	7.856
Sweden	2.109	2.333	2.500	2.945	7.891
UK	1.459	1.159	2.860	0.338	8.541
US	1.127	0.257	2.875	0.250	8.873
Average	2.069	1.937	2.852	1.681	7.931
Std. Dev.	0.585	0.767	1.016	1.201	0.585

Table 2
Country-level alphas

Panel A: Risk-adjusted returns of equal-weighted BC portfolios

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 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 September 1997 to December 2013.

	α	β_{MKT}	β_{HML}	β_{SMB}	β_{MOM}	Adj.R^2	Obs. No.
Brazil	**0.942**	**0.969*****	**0.349****	**0.535****	**-0.057**	0.312	183
	(0.606)	(0.135)	(0.147)	(0.211)	(0.142)		
Canada	**0.091**	**1.280*****	**-0.209**	**-0.320**	**-0.113**	0.648	90
	(0.485)	(0.113)	(0.217)	(0.277)	(0.142)		
Chile	**0.971***	**0.716*****	**-0.264**	**0.464****	**0.003**	0.280	143
	(0.503)	(0.146)	(0.211)	(0.216)	(0.109)		
Denmark	**-0.629**	**0.934*****	**0.074**	**0.788*****	**0.095**	0.685	143
	(0.403)	(0.076)	(0.160)	(0.154)	(0.077)		
Finland	**0.957**	**0.947*****	**0.295**	**0.501**	**-0.232**	0.471	92
	(0.715)	(0.165)	(0.390)	(0.359)	(0.156)		
France	**0.346**	**0.891*****	**-0.415***	**-0.366**	**-0.240**	0.592	127
	(0.453)	(0.093)	(0.242)	(0.252)	(0.101)		
Germany	**-0.445**	**1.028*****	**0.310**	**-0.167**	**-0.193****	0.642	128
	(0.437)	(0.092)	(0.301)	(0.189)	(0.096)		
Greece	**-0.584**	**1.143*****	**-0.275**	**0.282**	**-0.462**	0.488	96
	(0.791)	(0.227)	(0.630)	(0.461)	(0.180)		
India	**1.076**	**1.029*****	**0.274**	**0.089**	**-0.413*****	0.533	113
	(0.670)	(0.099)	(0.269)	(0.224)	(0.141)		
Japan	**0.768****	**0.985*****	**-0.083**	**0.623*****	**0.008**	0.701	79
	(0.332)	(0.076)	(0.156)	(0.156)	(0.096)		
Korea	**0.602**	**1.037*****	**-0.000**	**-0.194**	**-0.159**	0.552	132
	(0.570)	(0.082)	(0.209)	(0.229)	(0.200)		
Sweden	**0.870***	**1.136*****	**-0.623****	**0.377**	**0.129**	0.497	127
	(0.497)	(0.106)	(0.262)	(0.328)	(0.159)		
UK	**0.812**	**0.835*****	**-0.617*****	**0.405***	**-0.279****	0.446	150
	(0.569)	(0.081)	(0.195)	(0.216)	(0.126)		
US	**0.341*****	**1.036*****	**0.041*****	**0.201*****	**-0.125**	0.926	190
	(0.112)	(0.025)	(0.033)	(0.038)	(0.008)		

Table 2 (Cont'd)

Panel B: Risk-adjusted returns of value-weighted BC portfolios

This table reports regression results of monthly returns of value-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 a 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 September 1997 to December 2013.

	α	β_{MKT}	β_{HML}	β_{SMB}	β_{MOM}	Adj.R^2	Obs. No.
Brazil	**0.591**	**0.944*****	**0.228**	**0.420****	**-0.119**	0.306	183
	(0.580)	(0.134)	(0.168)	(0.204)	(0.123)		
Canada	**0.203**	**1.148*****	**0.093**	**-0.227**	**-0.137**	0.757	90
	(0.326)	(0.089)	(0.197)	(0.162)	(0.092)		
Chile	**1.039***	**0.762*****	**-0.288**	**0.580***	**0.070**	0.240	143
	(0.563)	(0.144)	(0.230)	(0.337)	(0.148)		
Denmark	**-1.020***	**1.045*****	**-0.220**	**0.442***	**0.151**	0.490	143
	(0.572)	(0.105)	(0.288)	(0.230)	(0.136)		
Finland	**0.739**	**0.960*****	**0.135**	**0.325**	**-0.298****	0.455	92
	(0.717)	(0.169)	(0.395)	(0.374)	(0.149)		
France	**-0.200**	**0.891*****	**-0.129**	**0.161**	**0.083**	0.478	127
	(0.424)	(0.081)	(0.257)	(0.212)	(0.100)		
Germany	**-0.453**	**0.957*****	**0.338**	**-0.285**	**-0.106**	0.509	128
	(0.549)	(0.092)	(0.289)	(0.205)	(0.101)		
Greece	**-0.582**	**1.216*****	**-0.050**	**-0.219**	**-0.734****	0.542	96
	(0.843)	(0.229)	(0.685)	(0.503)	(0.243)		
India	**0.861**	**1.022*****	**-0.085**	**0.172**	**-0.264***	0.559	113
	(0.608)	(0.097)	(0.222)	(0.200)	(0.149)		
Japan	**0.365**	**0.938*****	**-0.276****	**-0.011**	**-0.015**	0.721	79
	(0.308)	(0.074)	(0.130)	(0.155)	(0.103)		
Korea	**0.135**	**1.121*****	**0.107**	**-0.384**	**-0.158**	0.527	132
	(0.623)	(0.092)	(0.262)	(0.284)	(0.247)		
Sweden	**0.212**	**1.165*****	**-0.761*****	**0.313**	**0.140**	0.475	127
	(0.517)	(0.127)	(0.280)	(0.358)	(0.138)		
UK	**0.988****	**0.727*****	**-0.400****	**-0.243**	**-0.010**	0.360	150
	(0.475)	(0.081)	(0.156)	(0.202)	(0.096)		
US	**0.182**	**1.069*****	**-0.410*****	**-0.193*****	**-0.006**	0.864	190
	(0.160)	(0.036)	(0.047)	(0.055)	(0.030)		

Table 3
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 using the Fama and French (1997) 48-industry classification. 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 month fixed effects and winsorize stock returns at 0.5% in each tail. We report only the coefficient on *BC* for brevity. Standard errors, given in parentheses, are clustered by firm. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is September 1997 to December 2013.

	Dependent Variable		
	Raw returns	**Market-adjusted returns**	**Industry-adjusted returns**
Brazil	**0.077**	**0.093**	**-0.412**
	(0.689)	(0.650)	(0.439)
Canada	**2.099*** **	**2.186*** **	**1.630*** **
	(0.270)	(0.273)	(0.355)
Chile	**0.402***	**0.413***	**0.475**
	(0.228)	(0.226)	(0.301)
Denmark	**-0.588***	**-0.592***	**-0.295**
	(0.317)	(0.315)	(0.286)
Finland	**-0.613**	**-0.627**	**-0.541**
	(0.411)	(0.408)	(0.381)
France	**-0.334**	**-0.262**	**-0.510**
	(0.420)	(0.391)	(0.401)
Germany	**-0.541**	**-0.453**	**-0.425**
	(0.376)	(0.382)	(0.439)
Greece	**0.493**	**0.600**	**0.633**
	(0.533)	(0.512)	(0.539)
India	**1.265*** **	**1.317*** **	**1.317*** **
	(0.462)	(0.474)	(0.452)
Japan	**1.081*** **	**1.089*** **	**0.973*** **
	(0.306)	(0.309)	(0.319)
Korea	**1.396*** **	**1.392*** **	**1.132*** **
	(0.404)	(0.409)	(0.376)
Sweden	**-0.044**	**-0.040**	**-0.007**
	(0.418)	(0.415)	(0.413)
UK	**0.382**	**0.397**	**0.240**
	(0.316)	(0.305)	(0.320)
US	**0.362*** **	**0.409*** **	**0.424*** **
	(0.107)	(0.108)	(0.117)

Table 4: Country-level alpha regressions

This table reports the results of country-level regressions:

$$\alpha_c = \beta_0 + \beta_1 LMF_c + \varepsilon_t,$$

where α_c is the four-factor alpha of equal- or value-weighted BC portfolios for country c as reported in Table 2. For WLS, the weights are the standard errors of alpha estimates from Table 2. LMF_c is the labor market flexibility measure described in Table 1, Panel B. Standard errors are given in parentheses and corrected for heteroscedasticity. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

	(1)	**(2)**	**(3)**	**(4)**
	OLS		**WLS**	
	Alphas of EW Portfolio	**Alphas of VW Portfolio**	**Alphas of EW Portfolio**	**Alphas of VW Portfolio**
LMF_c	**0.464***	**0.608****	**0.654****	**0.804*****
	(0.260)	(0.201)	(0.277)	(0.169)
Constant	**-3.242**	**-4.603****	**-4.682***	**-6.100*****
	(2.078)	(1.567)	(2.186)	(1.302)
R^2	0.20	0.33	0.34	0.46
Number of obs.	14	14	14	14

Table 5
Stock returns across countries

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

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

where R_{cit} is the return for firm i in month t, either raw, market-adjusted, or industry-adjusted using the Fama and French (1997) 48-industry classification. 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. LMF_{ct} is the labor market flexibility measure described in Table 1, Panel B for country c at month t. $CountryControls_{ct}$ 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 taken from the World Bank; *GDPpc* measures GDP per capita taken from the World Bank; *ADRI* measures the anti-director rights index corrected by Spamann (2010); *IDV* is Hofstede measure of cultural individualism; *PriceInf* measures the efficiency of a firm's stock markets constructed following Fernandes and Ferreira (2009); *MktCapGDP* is the stock market capitalization over GDP taken from the World Bank. $FirmControls_{cit}$ include the firm-level controls described in Table 3. We include country and month fixed effects, and winsorize stock returns at 0.5% in each tail. The regression constant is not reported for brevity. Standard errors, given in parentheses, are double clustered by country and month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is September 1997 to December 2013.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent variables		**Raw returns**			**Market-adjusted returns**			**Industry-adjusted returns**	
BC_{cit}	**0.743*** **	**-4.059** **	**-4.888*** **	**0.770*** **	**-4.332** **	**-5.243*** **	**0.734*** **	**-4.358** **	**-4.960*** **
	(0.188)	(1.931)	(0.712)	(0.182)	(1.830)	(0.593)	(0.155)	(1.903)	(1.268)
$BC_{cit}*LMF_{ct}$		**0.569** **	**0.941*** **		**0.596** **	**0.938*** **		**0.600** **	**1.094*** **
		(0.246)	(0.130)		(0.234)	(0.121)		(0.236)	(0.161)
$BC_{cit}*RuleofLaw_c$			**0.040**			**0.021**			**-0.046**
			(0.149)			(0.128)			(0.167)
$BC_{cit}*GDPg_{ct}$			**0.089**			**0.101**			**0.129**
			(0.096)			(0.095)			(0.103)
$BC_{cit}*GDPpc_{ct}$			**-0.000**			**-0.000**			**0.000**
			(0.000)			(0.000)			(0.000)
$BC_{cit}*ADRI_c$			**-0.275** **			**-0.247** **			**-0.504*** **
			(0.116)			(0.113)			(0.134)
$BC_{cit}*IDV_c$			**-0.007**			**-0.005**			**-0.010**
			(0.010)			(0.010)			(0.013)
$BC_{cit}*PriceInf_{ct}$			**-0.561**			**-0.603**			**-0.873***
			(0.596)			(0.531)			(0.499)
$BC_{cit}*MktCapGDP_{ct}$			**0.004**			**0.004**			**0.003**

			(0.007)			(0.007)			(0.007)
LMF_{ct}		**0.570**	**-1.101**		**2.209**	**1.646**		**0.768**	**-0.925**
		(1.266)	(1.756)		(1.883)	(1.754)		(1.176)	(1.302)
$GDPg_{ct}$			**0.152**			**-0.096**			**-0.153**
			(0.144)			(0.111)			(0.115)
$GDPpc_{ct}$			**-0.001*** **			**-0.000** **			**-0.000*** **
			(0.000)			(0.000)			(0.000)
$PriceInf_{ct}$			**-1.200***			**0.229**			**-0.671**
			(0.648)			(0.353)			(0.482)
$MktCapGDP_{ct}$			**0.107*** **			**0.047** **			**0.035** **
			(0.025)			(0.019)			(0.017)
SIZE	**-0.298*** **	**-0.272** **	**-0.246***	**-0.272** **	**-0.246** **	**-0.241***	**-0.325*** **	**-0.325*** **	**-0.323*** **
	(0.112)	(0.117)	(0.126)	(0.112)	(0.120)	(0.125)	(0.102)	(0.103)	(0.109)
BM	**0.244**	**0.223**	**0.209**	**0.223**	**0.197**	**0.179**	**0.126**	**0.105**	**0.083**
	(0.262)	(0.255)	(0.254)	(0.258)	(0.245)	(0.240)	(0.245)	(0.240)	(0.232)
YIELD	**0.000**	**0.000**	**0.001*** **	**0.000**	**0.000**	**0.001*** **	**0.000***	**0.000***	**0.001*** **
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
RET2-3	**-0.398**	**-0.447**	**-0.744**	**-0.517**	**-0.497**	**-0.622**	**-0.457**	**-0.482**	**-0.616**
	(0.434)	(0.486)	(0.601)	(0.440)	(0.474)	(0.538)	(0.376)	(0.412)	(0.443)
RET4-6	**-0.045**	**-0.326**	**-0.473**	**-0.066**	**-0.231**	**-0.302**	**-0.072**	**-0.213**	**-0.257**
	(0.554)	(0.561)	(0.586)	(0.469)	(0.463)	(0.491)	(0.408)	(0.420)	(0.427)
RET7-12	**0.167**	**0.126**	**0.197**	**0.326**	**0.370**	**0.358**	**0.065**	**0.065**	**0.102**
	(0.451)	(0.523)	(0.487)	(0.343)	(0.364)	(0.370)	(0.334)	(0.343)	(0.341)
VOL	**0.158** **	**0.148***	**0.123**	**0.137***	**0.127**	**0.118**	**0.181*** **	**0.192*** **	**0.186*** **
	(0.077)	(0.085)	(0.086)	(0.078)	(0.087)	(0.086)	(0.061)	(0.066)	(0.068)
PRC	**0.149** **	**0.146***	**0.151***	**0.161***	**0.147***	**0.154**	**0.210** **	**0.212** **	**0.219** **
	(0.069)	(0.079)	(0.092)	(0.086)	(0.088)	(0.095)	(0.097)	(0.103)	(0.109)
Month fixed effects	included	included	included	included	included	included	included	included	included
Country fixed effects	included	included	included	included	included	included	included	included	included
R^2	0.13	0.13	0.13	0.02	0.02	0.02	0.02	0.02	0.02
Number of obs.	2,608,146	2,400,861	2,283,051	2,551,638	2,400,734	2,283,051	2,607,984	2,400,749	2,282,962

Table 6
Tobin's Q across countries

This table reports results of pooled panel regressions across countries:

$$Q_{cit} \text{ or } Q_{cit+1} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times LMF_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 LMF_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls2_{cit} + \varepsilon_{cit},$$

where Q_{cit} *or* Q_{cit+1} is industry-adjusted Tobin's Q for firm *i* in country *c* in year *t or t+1* 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. Industry Tobin's Q is the median among non-BC firms. 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. LMF_{ct} is the labor market flexibility measure 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. *LBVA* is the log of book value of assets. *FROE*, *F2ROE*, and *F3ROE* are the return on equity for the next three years. We include country and month fixed effects, and winsorize Tobin's Q at 0.5% in each tail. The regression constant is not reported for brevity. Standard errors, given in parentheses, are double clustered by country and month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is September 1997 to December 2013.

	(1)	**(2)**	**(3)**
Dependent variables	**Industry-adjusted Tobin's Q**		
	Contemporaneous		
BC_{cit}	**0.839*** **	**-3.356*** **	**-0.993**
	(0.148)	(0.810)	(1.176)
$BC_{cit}*LMF_{ct}$		**0.490*** **	**0.157** **
		(0.094)	(0.072)
$BC_{cit}*RuleofLaw_c$			**0.085**
			(0.192)
$BC_{cit}*GDPg_{ct}$			**0.043*** **
			(0.015)
$BC_{cit}*GDPpc_{ct}$			**-0.000**
			(0.000)
$BC_{cit}*ADRI_c$			**-0.105**
			(0.082)
$BC_{cit}*IDV_c$			**0.008**
			(0.006)
$BC_{cit}*PriceInf_{ct}$			**0.032**
			(0.051)
$BC_{cit}*MktCapGDP_{ct}$			**0.002***
			(0.001)
LMF_{ct}		**-0.080**	**-0.134*** **
		(0.134)	(0.037)
$GDPg_{ct}$			**0.008**
			(0.007)
$GDPpc_{ct}$			**-0.000**
			(0.000)
$PriceInf_{ct}$			**0.010**

			(0.027)
$MktCapGDP_{ct}$			**-0.002***
			(0.001)
LBVA	**-0.001**	**-0.001**	**-0.000**
	(0.001)	(0.001)	(0.001)
ROE	**-0.000**	**-0.000**	**-0.000**
	(0.000)	(0.000)	(0.000)
FROE	**0.000*** **	**0.000*** **	**0.000*** **
	(0.000)	(0.000)	(0.000)
F2ROE	**0.002**	**0.002**	**0.002**
	(0.002)	(0.002)	(0.002)
F3ROE	**0.001**	**0.001**	**0.002**
	(0.003)	(0.003)	(0.002)
Month fixed effects	included	included	included
Country fixed effects	included	included	included
R^2	0.02	0.02	0.02
Number of obs.	109,032	102,057	97,884

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:

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

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 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. LMF_{ct} is the labor market flexibility measure described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is the log of firm i's book-to-market ratio at the previous year end. We include country and year fixed effects. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered by country and year. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is September 1997 to December 2013.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	One year ahead			Two years ahead		
BC_{cit}	**0.037*** **	**-0.121*** **	**-0.048**	**0.028*** **	**-0.093*** **	**0.011**
	(0.007)	(0.037)	(0.069)	(0.004)	(0.026)	(0.071)
$BC_{cit}*LMF_{ct}$		**0.019*** **	**0.021*** **		**0.015*** **	**0.016*** **
		(0.005)	(0.004)		(0.003)	(0.004)
$BC_{cit}*RuleofLaw_c$			**-0.012** **			**-0.018*** **
			(0.006)			(0.005)
$BC_{cit}*GDPg_{ct}$			**0.001**			**-0.000**
			(0.001)			(0.001)
$BC_{cit}*GDPpc_{ct}$			**0.000*** **			**0.000*** **
			(0.000)			(0.000)
$BC_{cit}*ADRI_c$			**-0.009**			**-0.009**
			(0.007)			(0.008)
$BC_{cit}*IDV_c$			**-0.000**			**-0.000**
			(0.000)			(0.000)
$BC_{cit}*PriceInf_{ct}$			**0.003**			**-0.003**
			(0.003)			(0.004)
$BC_{cit}*MktCapGDP_{ct}$			**-0.000**			**-0.000**
			(0.000)			(0.000)
LMF_{ct}		**0.008**	**0.011*** **		**0.011***	**0.016*** **
		(0.005)	(0.003)		(0.006)	(0.005)
$GDPg_{ct}$			**0.000**			**-0.000**
			(0.000)			(0.000)
$GDPpc_{ct}$			**-0.000**			**0.000**
			(0.000)			(0.000)
$PriceInf_{ct}$			**0.002***			**0.002**
			(0.001)			(0.002)
$MktCapGDP_{ct}$			**-0.000*** **			**-0.000** **
			(0.000)			(0.000)
BM	**-0.011*** **	**-0.011*** **	**-0.011*** **	**-0.014*** **	**-0.014*** **	**-0.015*** **
	(0.001)	(0.001)	(0.001)	(0.002)	(0.003)	(0.003)
Year fixed effects	included	included	included	included	included	included
Country fixed effects	included	included	included	included	included	included
Number of obs.	135,541	127,760	119,504	94,274	86,818	80,767

Table 7 (Cont'd)

Panel B: Industry-adjusted net profit margin

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

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

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 month t, and zero otherwise. LMF_{ct} is the labor market flexibility measure described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is the log of firm i's book-to-market ratio at the previous year end. We include country and year fixed effects. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered by country and year. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is September 1997 to December 2013.

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Dependent variables		**One year ahead**			**Two years ahead**	
BC_{cit}	**0.036*** **	**-0.147** **	**-0.006**	**0.031*** **	**-0.165*** **	**-0.040**
	(0.011)	(0.064)	(0.048)	(0.007)	(0.057)	(0.055)
$BC_{cit}*LMF_{ct}$		**0.022*** **	**0.014***		**0.024*** **	**0.026*** **
		(0.008)	(0.008)		(0.007)	(0.006)
$BC_{cit}*RuleofLaw_c$			**-0.018*** **			**-0.035*** **
			(0.004)			(0.004)
$BC_{cit}*GDPg_{ct}$			**0.002**			**-0.001**
			(0.001)			(0.002)
$BC_{cit}*GDPpc_{ct}$			**0.000*** **			**0.000*** **
			(0.000)			(0.000)
$BC_{cit}*ADRI_c$			**-0.007**			**-0.006**
			(0.005)			(0.005)
$BC_{cit}*IDV_c$			**0.000** **			**0.001*** **
			(0.000)			(0.000)
$BC_{cit}*PriceInf_{ct}$			**0.007**			**-0.005**
			(0.008)			(0.006)
$BC_{cit}*MktCapGDP_{ct}$			**-0.000*** **			**-0.000*** **
			(0.000)			(0.000)
LMF_{ct}		**0.011**	**0.012**		**0.012** **	**0.014*** **
		(0.009)	(0.008)		(0.005)	(0.005)
$GDPg_{ct}$			**-0.000**			**-0.000**
			(0.000)			(0.000)
$GDPpc_{ct}$			**-0.000**			**0.000**
			(0.000)			(0.000)
$PriceInf_{ct}$			**0.001**			**0.001**
			(0.001)			(0.003)
$MktCapGDP_{ct}$			**-0.000*** **			**-0.000** **
			(0.000)			(0.000)
BM	**-0.011*** **	**-0.011*** **	**-0.012*** **	**-0.012*** **	**-0.012*** **	**-0.013*** **
	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.004)
Year fixed effects	included	included	included	included	included	included
Country fixed effects	included	included	included	included	included	included
Number of obs.	130,948	123,240	115,291	90,836	83,453	77,588

Table 7 (Cont'd)

Panel C: Industry-adjusted one-year sales growth

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

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

where SG_{cit+j} is the percentage growth in sales over the previous year 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 month t, and zero otherwise. LMF_{ct} is the labor market flexibility measure described in Table 1, Panel B. $CountryControls_{ct}$ include the country-level controls described in Table 5. BM is the log of firm i's book-to-market ratio at the previous year end. We include country and year fixed effects. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered by country and year. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is September 1997 to December 2013.

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Dependent variables		**One year ahead**			**Two years ahead**	
BC_{cit}	**0.011*** **	**0.017**	**-0.016**	**0.014*** **	**-0.045** **	**-0.119*** **
	(0.003)	(0.036)	(0.033)	(0.004)	(0.022)	(0.030)
$BC_{cit}*LMF_{ct}$		**-0.001**	**0.018*** **		**0.008*** **	**0.016*** **
		(0.004)	(0.006)		(0.003)	(0.003)
$BC_{cit}*RuleofLaw_c$			**-0.002**			**0.010***
			(0.001)			(0.005)
$BC_{cit}*GDPg_{ct}$			**-0.001**			**0.003***
			(0.001)			(0.002)
$BC_{cit}*GDPpc_{ct}$			**-0.000*** **			**-0.000**
			(0.000)			(0.000)
$BC_{cit}*ADRI_c$			**-0.010** **			**-0.005** **
			(0.004)			(0.002)
$BC_{cit}*IDV_c$			**-0.000** **			**-0.000** **
			(0.000)			(0.000)
$BC_{cit}*PriceInf_{ct}$			**0.004**			**-0.002**
			(0.009)			(0.010)
$BC_{cit}*MktCapGDP_{ct}$			**-0.000***			**-0.000** **
			(0.000)			(0.000)
LMF_{ct}		**0.012** **	**0.015*** **		**0.005**	**0.015**
		(0.005)	(0.002)		(0.009)	(0.009)
$GDPg_{ct}$			**-0.000** **			**0.001**
			(0.000)			(0.001)
$GDPpc_{ct}$			**0.000**			**0.000**
			(0.000)			(0.000)
$PriceInf_{ct}$			**-0.002** **			**0.010**
			(0.001)			(0.008)
$MktCapGDP_{ct}$			**-0.000**			**-0.000**
			(0.000)			(0.000)
BM	**-0.009*** **	**-0.010*** **	**-0.010*** **	**-0.007*** **	**-0.008*** **	**-0.009*** **
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Year fixed effects	included	included	included	included	included	included
Country fixed effects	included	included	included	included	included	included
Number of obs.	133,576	125,548	117,384	92,302	84,689	78,689

Table 8

Earnings surprises across countries

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

$$Surprise_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 BC_{cit} \times LMF_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} + \delta_1 LMF_{ct} + \delta_2 CountryControls_{ct} + \delta_3 FirmControls3_{cit} + \varepsilon_{cit},$$

where $Surprise_{cit}$ is the one- or two-year earnings surprise for firm i in country c in year t. The one-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. The two-year earnings surprise is calculated in a similar fashion, with the consensus forecast taken 20 months before the year-end. 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. LMF_{ct} is the labor market flexibility measure described in Table 1, Panel B for country c at month t. $CountryControls_{ct}$ include the country-level controls described in Table 5. $FirmControls3_{cit}$ include *BM* which is the log of a firm's book-to-market ratio and *SIZE* which is a firm's log market capitalization, both calculated one-year (two-year) prior for one-year (two-year) earnings surprises. We include country and month fixed effects. The regression constant is not reported for brevity. Standard errors, given in parentheses, are robust to heteroscedasticity and misspecification, and clustered by country and month. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively. The sample period is September 1997 to December 2013.

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Dependent variables	**One-year earnings surprises**			**Two-year earnings surprises**		
BC_{cit}	**1.016**	**1.147**	**0.871**	**4.320**	**3.823**	**3.482**
	(1.241)	(1.300)	(1.264)	(3.064)	(3.303)	(3.294)
$BC_{cit}*LMF_{ct}$	**0.218*** **	**0.225** **	**0.273** **	**0.632** **	**0.791*** **	**0.848*** **
	(0.080)	(0.109)	(0.108)	(0.251)	(0.276)	(0.275)
$BC_{cit}*RuleofLaw_c$	**-0.012**	**-0.064**	**-0.090**	**-0.558*** **	**-0.598** **	**-0.630*** **
	(0.199)	(0.201)	(0.203)	(0.177)	(0.242)	(0.243)
$BC_{cit}*GDPg_{ct}$	**0.080*** **	**0.068*** **	**0.073*** **	**0.054**	**0.046**	**0.049**
	(0.014)	(0.016)	(0.018)	(0.096)	(0.110)	(0.110)
$BC_{cit}*GDPpc_{ct}$	**0.000**	**0.000**	**0.000**	**0.000** **	**0.000***	**0.000** **
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$BC_{cit}*ADRI_c$	**-0.404*** **	**-0.406*** **	**-0.387*** **	**-0.844*** **	**-0.886*** **	**-0.867*** **
	(0.081)	(0.077)	(0.074)	(0.230)	(0.283)	(0.274)
$BC_{cit}*IDV_c$	**-0.019**	**-0.019**	**-0.023***	**-0.043** **	**-0.047** **	**-0.051*** **
	(0.014)	(0.013)	(0.013)	(0.017)	(0.019)	(0.019)
$BC_{cit}*PriceInf_{ct}$	**-0.204**	**-0.264***	**-0.257***	**-0.290***	**-0.223**	**-0.231**
	(0.143)	(0.143)	(0.139)	(0.164)	(0.210)	(0.210)
$BC_{cit}*MktCapGDP_{ct}$	**0.003**	**0.004**	**0.004**	**0.006**	**0.006**	**0.006**
	(0.003)	(0.003)	(0.003)	(0.005)	(0.006)	(0.006)
LMF_{ct}	**1.035**	**1.314**	**1.344**	**0.682***	**0.636**	**0.630**
	(0.755)	(1.008)	(1.026)	(0.403)	(0.477)	(0.478)
$GDPg_{ct}$	**0.095*** **	**0.105*** **	**0.101*** **	**0.193*** **	**0.193*** **	**0.194*** **
	(0.023)	(0.025)	(0.025)	(0.044)	(0.045)	(0.046)
$GDPpc_{ct}$	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$PriceInf_{ct}$	**0.201** **	**0.188** **	**0.178** **	**0.168***	**0.145**	**0.150**
	(0.085)	(0.076)	(0.079)	(0.087)	(0.093)	(0.095)
$MktCapGDP_{ct}$	**-0.009**	**-0.008**	**-0.008**	**-0.011***	**-0.012***	**-0.012***
	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)

BM		**-0.046*****	**-0.018**		**0.054*****	**0.078*****
		(0.008)	(0.013)		(0.011)	(0.013)
SIZE			**0.093*****			**0.081*****
			(0.017)			(0.019)
Month fixed effects	included	included	included	included	included	included
Country fixed effects	included	included	included	included	included	included
Number of obs.	62,571	58,307	58,307	54,423	46,626	46,626

Figure 1
Country alphas and labor market flexibility

The figure plots the abnormal returns to equal- and value-weighted portfolios of the Best Companies lists for 14 countries versus each country's labor market flexibility measure described in Table 1, Panel B. The abnormal returns are the four-factor alphas taken from Table 2.