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

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Introduction

Employee satisfaction

Firm performance

Employee satisfaction

- **Compensation**: pay and benefits
- **Workers' Union**: representations of employees in the decision making process
- **Workplace culture**: trust, communication, responsibility, flexible working hours, etc.

Firm performance

- **Market valuation**: MtB ratio, Tobin's Q
- **Shareholder's value**: stock returns
- **Accounting performance**: profitability, earnings, operating performance, etc.

Introduction

Employee satisfaction - - - increase? or decrease? - - -→ Firm performance
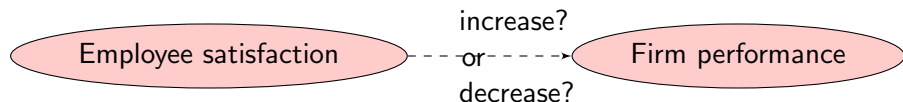
Negative or insignificant

- Abowd (1989AER): announcements of **pay** rises reduce shareholder's value $-for-$
- Gorton and Schmid (2004): high **codetermination** in German firms reduces their market valuation
- Cronqvist et al. (2009): entrenched managers **pay** their workers more

Positive
- (Very many) studies document a positive correlation, but not necessarily causal
- Edmans (2011JFE, 2012AMP): likely causal effect of employee satisfaction in the U.S
  - ▶ But, need not extend to other countries

This Paper's Contribution

- Study the link between employee satisfaction and firm value in 14 countries

- Employee satisfaction is associated with
  - ▶ Higher long-run returns
  - ▶ Higher current valuation ratios
  - ▶ Higher future profitability
  - ▶ Higher future earnings surprises

- But **only** in countries with flexible labor markets

Benefits of Employee Satisfaction

- Superior **retention** and **recruitment**
  - ▶ Satisfaction may be valued more by employees than cash (Maslow (1943), Hertzberg (1959))

- Superior **motivation**
  - ▶ Extrinsic motivators less effective in the modern firm
  - ▶ Efficiency wage channels
    - ★ Akerlof (1982) gift exchange model
    - ★ Shapiro and Stiglitz (1984): employees work hard to avoid being fired from a satisfying job
  - ▶ Tolerance for failure and reputation for providing job security **spurs innovation**

Why Might Employee Satisfaction Subtract Value?

- Managers may over-spend due to an **agency problem**
  - ▶ More pleasant worker relationship (Jensen and Meckling (1976))
  - ▶ Employee benefits as a takeover defense (Pagano and Volpin (2005))
  - ▶ Employment protection increases labor costs and reduces profitability (Simintzi, Vig, and Volpin (2015))
  - ▶ High worker pay linked to entrenchment (Cronqvist et al. (2009))

Flexible Labor Markets

- **Recruitment** benefits are higher since firms engage in more hiring
  - ▶ Hiring is easier (due to fewer restrictions on the contracts firms can offer)
  - ▶ Firing underperformers is easier, creating more vacancies

- **Retention** benefits are higher since rate of departures is higher
  - ▶ Rivals face fewer constraints on hiring away workers
  - ▶ Greater firing risk encourages workers to invest in general rather than firm-specific skills (Thelen (2001)), increasing their ability to be recruited elsewhere

Flexible Labor Markets (cont'd)

- **Motivation** benefits are higher
  - ES seen more as a gift since they are not mandatory by law
  - Shapiro and Stiglitz (1984) effect is stronger if firing more likely
  - Cost of autonomy (an element of ES) is that workers may abuse by slacking; alleviated by firing ability
  - Weak dismissal laws deter innovation as firm may punish short-run failures or hold-up workers if innovation is successful (Acharya, Baghai, and Subrahmanian (2013))
  - Weak collective bargaining give individuals the ability to voluntarily take value-creating actions

Rigid Labor Markets

- All of above lead to a **downward shift** in MB curve in rigid labor markets
  - ▶ Harder hiring and firing leads to lower recruitment, retention, and motivation benefits of ES

- Expenditure on ES likely exhibits **diminishing returns**, leading to **downward movement** along the MB curve
  - ▶ When regulations already ensure a minimum level of worker welfare, companies with high satisfaction relative to their peers may be exceeding the optimal level

Rigid Labor Markets

- High ES may result from **labor control**
  - ▶ If workers (partly) determine HR policies, ES can be excessive from shareholders' perspective
  - ▶ Gorton and Schmid (2004): one-half supervisory board representation leads to 31% discount
  - ▶ Faleye, Mehrotra, and Morck (2006): labor-controlled U.S. firms deviate more from value maximization and exhibit lower labor TFP
  - ▶ Chen, Kacperczyk, and Ortiz-Molina (2011): unions increase a firm's operating leverage and cost of equity
  - ▶ Atanassov and Kim (2009), Lee and Mas (2012): unions protect underperforming managers and reduce firm value

Introduction
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Hypothesis

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

Note that

- *This hypothesis does not require all of the channels through which employee satisfaction affects firm value to depend on labor market flexibility, only that a sufficient proportion do.*

The Best Companies Survey

- Great Place to Work Institute$^{®}$ creates "Best Companies to Work For"
  - ► Arguably the most respected and prestigious measure of ES
  - ► Available in 45 countries worldwide

- 2/3 of score comes from confidential employee responses to a 57-question survey, 1/3 from Institute's own evaluation of firm policies

- Companies are scored in four areas:
  - ► Credibility (communication to employees)
  - ► Respect (opportunities and benefits)
  - ► Fairness (compensation and diversity)
  - ► Pride/Camaraderie (teamwork, philanthropy, and celebrations)

Employee Satisfaction

- Countries with 5 years' history of BC listing
  - ▶ Include only firms headquartered and primarily listed in that country
  - ▶ Need at least 10 BCs
  - ▶ 14 countries meet these criteria
- Earliest start year for a non-US country is 1997 (Brazil), so we study September 1997-December 2013

Labor Market Flexibility: EPL

- OECD's Employment Protection Legislation index, used in Blanchard and Portugal (2000), Messina and Vallanti (2007), Pagano and Volpin (2005b), and Simintzi, Vig, and Volpin (2015)

  1. Individual dismissal of workers with regular contracts
  2. Additional costs for collective dismissals
  3. Regulation of temporary contracts

- 1, 2 constrain hiring; 3 constrains firing

Labor Market Flexibility: EFW

- LMF categories of Fraser Institute's Economic Freedom of the World index, used in Bernal-Verdugo, Furceri, and Guillaume (2012a, 2012b), Freeman, Kruse, and Blasi (2008), and Haltiwanger, Scarpetta, and Schweiger (2008)

  1. Hiring regulations and minimum wage (WEF)
  2. Hiring and firing regulations (WEF)
  3. Centralized collective bargaining (WEF)
  4. Hours regulations (World Bank)
  5. Mandated cost of worker dismissal (World Bank)
  6. Conscription

- 1, 2, 4 measure ease of hiring, 5 the ease of firing, 3 the power of labor unions, 6 the supply side

Country-Level Methodology

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

- Calculate the returns to a (EW or VW) Best Company portfolio from one month after list publication
- Control for risk using Carhart's (1997) four factors
  - ▶ Standard errors are corrected for heteroscedasticity and autocorrelation using Newey-West's(1987) estimator with four lags
  - ▶ Results based Fama and French (2015) five factors plus momentum are very similar

Equal-Weighted Country Alphas and EPL
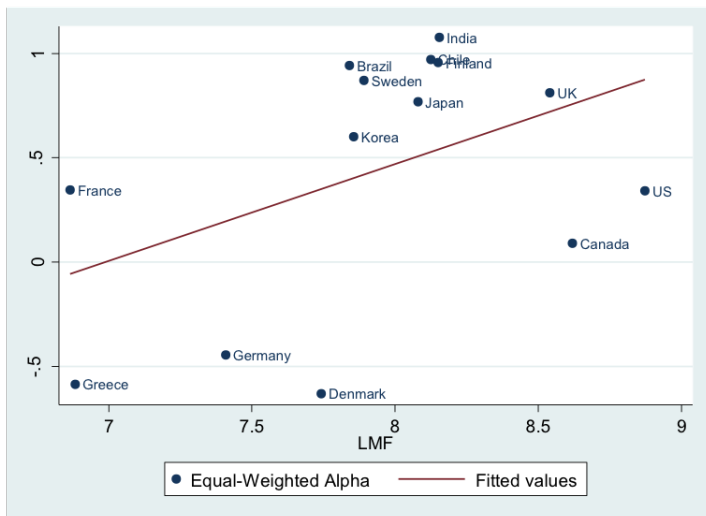
Value-Weighted Country Alphas and EPL
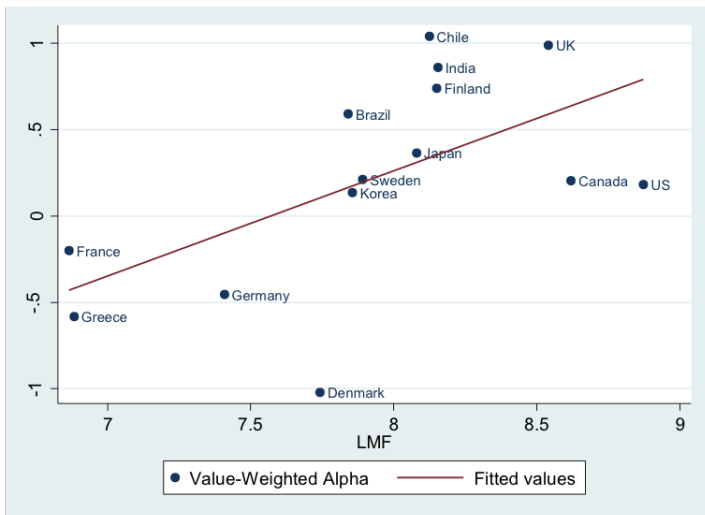
Firm-Level Methodology

$$R_{cit} = \beta_0 + \beta_1 BC_{cit} + \beta_2 \mathbf{BC}_{cit} \times \mathbf{LMF}_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct}$$
$$+ \beta_1 LMF_{ct} + \beta_2 CountryControls_{ct} + \beta_3 FirmControls_{cit} + \varepsilon_{cit}$$

- R_{cit} is raw, market-adjusted, or industry-adjusted using FF48
- *CountryControls*: rule of law, GDP growth, individualism (Chui, Titman, and Wei (2010)), price informativeness, GDP per capita, stock market capitalization over GDP
- *FirmControls* from Brennan, Chordia, and Subrahmanyam (1998): *SIZE*, *BM*, *YLD*, *RET*$2-3$, *RET*$4-6$, *RET*$7-12$, *VOL*, *PRC*
  - ▶ Double fixed effects: country and year-month
  - ▶ Double cluster standard errors: country and year-month

Stock Returns across Countries

	EPL			EFW		
Raw						
BC	0.743***	-4.059**	-4.888***	0.608**	-0.516*	1.478
$BC \times LMF$		0.569**	0.941***		0.145**	0.309***
Ctry Ctrls	N	N	Y	N	N	Y
Market-adjusted						
BC	0.770***	-4.332**	-5.243***	0.636**	-0.571	1.855
$BC \times LMF$		0.596**	0.938***		0.155**	0.330***
Ctry Ctrls	N	N	Y	N	N	Y
Industry-adjusted						
BC	0.734***	-4.358**	-4.960***	0.600***	-0.361	3.015
$BC \times LMF$		0.600**	1.094***		0.123**	0.313***
Ctry Ctrls	N	N	Y	N	N	Y

Potential Explanations

- A: ES has particularly high value in flexible labor markets, but market does not immediately incorporate this value
- B: ES allows firms to pass SRI screens
- C: Abnormal returns result from risk
  - ▶ Hard to reconcile with magnitudes, and negative returns in some countries
- D: ES is irrelevant, but the market think it's wasteful
  - ▶ Hard to reconcile with negative returns in some countries
- C and D: in flexible (regulated) labor markets trade at an initial discount (premium)
  - ▶ Q regression: BC is significant; when $BC \times LMF$ is included, it's significant but BC becomes insignificant

Tobin's Q across Countries

$$
\begin{aligned}
Q_{cit} &= \beta_0 + \beta_1 BC_{cit} + \beta_2 \mathbf{BC}_{cit} \times \mathbf{LMF}_{ct} + \beta_3 BC_{cit} \times CountryControls_{ct} \\
&+ \beta_1 LMF_{ct} + \beta_2 CountryControls_{ct} + \beta_3 FirmControls_{cit} + \varepsilon_{cit}
\end{aligned}
$$

	EPL			EFW		
Tobin's Q						
BC	0.839***	-3.356**	-0.993***	0.684**	-0.063	0.080
$BC \times LMF$		0.490**	0.157***		0.095**	0.113***
Ctry Ctrls	N	N	Y	N	N	Y

Further Evidence on A (ES has +/- Value)

- Accounting profitability:
  - ▶ 1-year and 2-year ahead industry-adjusted NPM and ROA regressions: BC is significant; when $BC \times LMF$ is included, it's significant but BC becomes insignificant
- Earnings surprises:
  - ▶ Hard test to pass: Core, Guay, and Rusticus (2006) overturn Gompers, Ishii, and Metrick (2003)
  - ▶ 1-year and 2-year ahead earnings surprises: $BC \times EPL$ is significant, $BC \times EFW$ is positive but insignificant

Causality

- Prior studies have correlated ES with accounting profits, valuation ratios, employee turnover, customer satisfaction etc.
  - ▶ **Omitted variables and reverse causality** cloud interpretation
- This paper (and Edmans (2011, 2012)) studies **future stock returns**
  - ▶ If ES were the result of high profits, these profits would be in the stock price today, since they are tangible
  - ▶ Capture all potential channels through which ES may matter
  - ▶ Takes into account the cost of ES
  - ▶ Allows for controls for risk
- **Reverse causality** if employees can forecast stock returns:
  - ▶ Benartzi (2001), Bergman and Jenter (2007) suggest they cannot
  - ▶ Jenter, Lewellen, and Warner (2011): even CEOs can't forecast past 100 days
    - ★ Survey time lag is 7 months in the US
- **Joint test** of the value of ES and market efficiency

Selection Issues

- Firms apply to be considered for the list
  - ▶ To cause bias, selection decision must be correlated with either independent variable (satisfaction) or outcome variable (future returns)
- Correlation with satisfaction
  - ▶ Low-satisfaction firms choose not to apply because they expect not to make the list (increases accuracy)
  - ▶ High-satisfaction firms choose not to apply because they don't need certification (attenuates)
- Correlation with stock returns
  - ▶ If decision to apply is correlated with current profitability or past stock returns, should already be in current price
  - ▶ If decision to apply is correlated with expected future stock returns, likely to be over next 100 days

Conclusions

- Results of Edmans (2011, 2012) are not anomalous in a global context
  - ▶ But do not automatically extend either
  - ▶ BC is associated with superior returns, valuation, accounting profits, and earnings surprises only in countries with high LMF
- Importance of institutional context for
  - ▶ Managers. Investing in ES doesn't always pay off
  - ▶ Investors. An ES strategy doesn't always pay off
    - ★ Implications for investment strategies more generally, particularly given most studies focus on US
    - ★ Particularly for strategies that depend on institutional environment, such as SRI (e.g. gender diversity, animal rights, ethical industries)