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# Altruism or Self-Interest? ESG and Participation in Employee Share Plans

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# Background

## — Strong Policymakers' Interest in Employee Share Plans

- 8% of firms' stocks owned by employees in the US, 3.5% in France
- Legislative proposals in the US, loi Pacte in France to increase firms' tax benefits
- Inflation/« great resignation »: increase **employee's motivation**, induce employees to **invest in stocks**, reduce pay differential and wealth gap

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Opinion **The FT View**

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**Les Echos**

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# Research Question

- What motivates employees to invest in their company stock?
  - **Financial motives**
    - **Stock performance:** Bernartzi (2001), Choi et al. (2004), Huberman and Sengmueller (2004), Babenko and Sen (2015)
    - **Financial incentives** (tax subsidy, bonus match or discount): Engelhardt and Madrian (2004)
    - **Financial decision influenced by coworkers' choices** (Ouimet and Tate, 2020)
  - **Loyalty**
    - Emotional tie between the employee and her firm
    - Even without financial incentives, employees invest a large portion of their assets in employee savings' plans, thus **foregoing diversification benefits**
    - **Employees of stand-alone firms invest more than conglomerate ones** (Cohen, 2009)



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# Our Hypothesis

## (1) Employees are increasingly sensitive to the ESG practices of their employer

- ESG as a **worker retention tool**, in industries where human capital is key, see Flammer and Luo (2017), Dottling et al. (2018), Cen et al. (2021), Kruger et al. (2021)
- Employee activism

## (2) ESG performance affects employee's loyalty

- Because the employee approves ESG policies or because ESG policies affect the employee well being directly

→ Our question: are employees sensitive to their company's ESG practices when investing in stock ownership plans?



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## Preview of the Findings (1/2)

- Employees are significantly **less likely to** invest in the stock of their employer **following bad ESG news**
- **Possible interpretations**
  - **Pecuniary motives:** exploit underreaction to ESG news?
    - should react more to news with largest stock price reaction
  - **Altruism?** Employees sensitive to firms' externalities that affect society at large
    - should react more to E-type / international policies
  - **Self Interest?** Employees care about policies that do good for themselves
    - Should be sensitive to firms' externalities that affect their working conditions



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## Preview of the Findings (2/2)

- The effect comes mainly from bad news related to:
  - The « **Social** » pillar of ESG, and more precisely, « **working conditions** »
  - **Local news**
  - Even if these news **do not affect significantly more firm performance**
- Our interpretation: **self-interest?**
  - Consistent with results finding an **ESG home bias** (Groen-Xu and Zeume, 2021)



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# Institutional Details

## — Employee savings plans in France

- French companies >50 employees must offer employee saving plans
- Employees can invest their variable remuneration + can add voluntary contributions
  - Tax incentives to invest in the plan (similar to 401k)
- Firms offer menu of funds to employees

## — Employer stock funds

- Typically matched by the employer
- Often offered with a discount associated with a 5-year illiquidity period



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# Savings Plan Data

- **From Amundi**

- 45% market share in France, €67bn in assets

- **We keep listed firms from SBF120 index with at least one stock fund**

- 22 stocks (parent company) and 247 firms (subsidiaries)
- From 2015 to 2018, the average firm issues 4.8 new stock funds

- **Employee-level data**

- 383,473 employees
- Information at the monthly frequency
  - age, gender, zip code, variable compensation, investments and assets held in each fund in the savings plan



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# Firms' ESG Policy - RepRisk

- **ESG incidents from RepRisk**

- RepRisk: daily global news about negative ESG incidents
- 28 distinct issues: e.g. pollution (E), workplace discrimination (S), executive compensation (G)
- One incident can belong to multiple E/S/G categories

- **RepRisk rating**

- From AAA to D (recoded from 0 to 10)

- **Reprisk index**

- From 0 to 100



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## Reprisk News - Example

### Is Nutella made with nuts picked by children?

By Tim Whewell  
BBC News, Turkey

🕒 19 September 2019



### Ferrero International SA Sep.19, 2019

#### Related issues

- Child labor
- Human rights abuses and corporate complicity
- Supply chain issues
- Violation of national legislation
- Occupational health and safety issues
- Poor employment conditions



# Summary Statistics

## — Investment in the plan

	p1	p5	p25	mean	p50	p75	p95	p99	sd	N
Invests in company stock	0.00	0.00	0.00	0.39	0.00	1.00	1.00	1.00	0.49	1,643,953
Amount in company stock	0.00	0.00	0.00	490.87	0.00	192.00	2183.60	7603.15	4401.06	1,643,953
Invests in SRI	0.00	0.00	0.00	0.09	0.00	0.00	1.00	1.00	0.29	1,643,953
Age	24.00	27.00	36.00	45.95	46.00	55.00	67.00	74.00	12.37	1,643,953
Female	0.00	0.00	0.00	0.20	0.00	0.00	1.00	1.00	0.40	1,643,953
Total assets	26.40	153.27	2013.83	29808.55	10131.54	31991.22	116120.00	283793.80	68757.90	1,643,953

## — ESG variables

	p1	p5	p25	mean	p50	p75	p95	p99	sd	N
Rating Reprisk	2.00	3.00	5.00	6.10	7.00	8.00	8.00	9.00	1.83	1,056
Index Reprisk	0.00	0.00	6.50	19.93	20.00	26.00	54.00	61.00	15.86	1,056
# news	0.00	0.00	0.00	12.80	3.00	12.00	76.00	93.00	22.65	1,056
# news E	0.00	0.00	0.00	6.56	1.00	3.00	50.00	62.00	14.61	1,056
# news S	0.00	0.00	0.00	7.22	1.00	6.00	41.00	53.00	13.15	1,056
# news G	0.00	0.00	0.00	5.09	1.00	6.00	29.00	37.00	8.83	1,056



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# Empirical Strategy

## — Panel regressions

- at the employee-month level
- **focusing on months when employers issue employee-shareholder funds**

$$Y_{i,j,t} = \beta ESG\ Incident_{j,t-1} + Controls_{j,t-1} + FE_i + FE_t$$

- $Y_{i,j,t}$  : investment decision of employee  $i$ , in firm  $j$ , in month  $t$
- $ESG\ Incident_{j,t-1}$ : lagged RepRisk measure of bad ESG news
- $Controls_{j,t-1}$ : lagged control variables at the firm level
  - Nb. Employees, Assets, Cash, Leverage, Capex, R&D, Market Value, ROA, Profit margin, Labor productivity, Sales
  - Stock Return, Stock volatility, P/E ratio, D/P ratio, Book to Price
  - Nb. Funds and Nb. Equity funds proposed in the plan
- $FE_i, FE_t$ : Employee and year-month fixed effects
- Clustering at the firm level



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# Identifying Assumptions

- Employees decide whether to invest in their employer's stock depending on ESG practices, i.e. **employees observe**  $ESG_{j,t-1}$ 
  - Because  $ESG_{j,t-1}$  reflects **information available to employees**
  - Or because employees learn about it **from media coverage**
- **Firms' decisions** to issue employee-shareholder funds **independent** from  $ESG_{j,t-1}$



# Employees Invest Less Following Bad ESG News

	(1)	(2)	(3)	(4)
	Invests in company stock	Invests in company stock	Amount in company stock (ln)	Amount in company stock (ln)
# news (ln)	-0.222*** (0.0369)	-0.263*** (0.0463)	-1.729*** (0.251)	-2.108*** (0.330)
Individual total assets (ln)		0.0280*** (0.00887)		0.246*** (0.0838)
Receives variable remuneration		0.277*** (0.0300)		2.551*** (0.215)
Constant				
Individual FE				
Year-Month FE				
Observations				
R2	0.75	0.76	0.72	0.74

• If Nb bad ESG news multiplied by 2

• 18% drop in the likelihood to invest  $(\ln(2) \cdot -0.263)$ , 46% drop relative to sample mean (39%)

• € 380,  $(490 \cdot (2^{(-2.108)} - 1))$  decrease in amount invested



## .... In Particular Social News

	(1) Invests in company stock	(2) Invests in company stock	(3) Invests in company stock	(4) Invests in company stock
# news E (ln)	-0.146** (0.0681)			0.141** (0.0571)
# news S (ln)		-0.374*** (0.0741)		-0.546*** (0.126)
# news G (ln)			-0.185*** (0.0445)	0.0650 (0.0661)

- Effect coming mainly from **Social News**
- Whereas **bad news in the E category** are associated with an **increase** in investment



# Exploring the Effect of Environmental news

	(1) Invests in company stock	(2) Invests in company stock	(3) Invests in company stock	(4) Invests in company stock	(5) Invests in company stock
# news E (ln)	-0.146** (0.0681)			0.141** (0.0571)	-0.324** (0.127)
# news S (ln)		-0.374*** (0.0741)		-0.546*** (0.126)	-0.555*** (0.104)
# news G (ln)			-0.185*** (0.0445)	0.0650 (0.0661)	0.0824 (0.0531)
# news E × firm in polluting sector					0.549*** (0.154)
				-2.968* (1.514)	-2.657* (1.534)
				Yes	Yes
				Yes	Yes
				Yes	Yes
Observations	1,643,953	1,643,953	1,643,953	1,643,953	1,643,953
R <sup>2</sup>	0.76	0.76	0.76	0.76	0.76

- Effect comes from **firms in polluting industries** (mining, construction, manufacturing, transportation, public utilities)
- Employees self-select into industries
- Those choosing to work in polluting industries less sensitive to environmental issues



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# What Type of S News Matters the Most?

## — We create 3 sub-categories of S news:

- Child labor
- Forced labor
- Human rights issues

« Labor and human rights »

- Employment discrimination
- Social discrimination
- Health and safety conditions
- Employment conditions
- Freedom of association issues

« Working conditions,  
employment and social  
discrimination »

- Communities impact
- Local participation

« Communities and local  
participation »



# What Type of S News Matters the Most?

	(1) Invests in company stock	(2) Invests in company stock	(3) Invests in company stock	(4) Invests in company stock	(5) Invests in company stock
# news labor & human rights (ln)	-0.238** (0.112)			-0.116 (0.0915)	-0.0730 (0.114)
# news working conditions employment & social discrimination (ln)		-0.245*** (0.0660)		-0.236** (0.103)	-0.198** (0.0848)
# news communities & local participation (ln)			-0.159** (0.0626)	0.0305 (0.103)	0.175 (0.186)
# news E (ln)					-0.0195 (0.0631)
# news G (ln)					-0.162 (0.131)
Constant	-1.054 (1.432)	-3.906** (1.517)	-1.380 (1.665)	-4.053*** (1.375)	-3.878** (1.565)
Controls	Yes	Yes	Yes	Yes	Yes
Individual FE	<div>• Effect is coming from « working conditions, employment and social discrimination »</div>				
Year-Month FE					
Observations	1,643,953	1,643,953	1,643,953	1,643,953	1,643,953
R <sup>2</sup>	0.76	0.76	0.76	0.76	0.76



## Local News Matters More

	(1) <u>Invests in</u> <u>company stock</u>	(2) <u>Invests in</u> <u>company stock</u>	(3) Amount invested in company stock (ln)	(4) Amount invested in company stock (ln)
# news France (ln)	0.00958 (0.053)		0.0834 (0.441)	
# news (ln)	-0.270*** (0.062)		-2.166*** (0.453)	
# news France E (ln)		0.197 (0.196)		2.009 (1.242)
# news France S (ln)		-0.376*** (0.104)		-2.931*** (0.814)
# news France G (ln)		0.234** (0.113)		2.211** (0.853)
# news E (ln)		0.197* (0.106)		1.343** (0.681)
# news S (ln)		-0.186 (0.153)		-1.375 (1.038)
# news G (ln)		-0.219* (0.126)		-2.285** (0.920)
Constant	-2.141 (1.307)	-2.741 (2.149)	-8.416 (9.678)	-16.250 (13.680)
<u>Controls</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Individual FE	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Year-Month FE	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Observations	1,643,953	1,643,953	1,643,953	1,643,953
R <sup>2</sup>	0.76	0.76	0.74	0.74



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# Loyalty or Pecuniary Motives ?

- Link between ESG and investment in employer's stock could be driven by **anticipated gains**
  - Evidence of slow reaction to Reprisk ESG news (Glossner, 2021)
  - Perhaps employees invest to take advantage of this
- If this is the case
  - **More sophisticated** (e.g., richer) employees should be more sensitive to ESG news
    - Effects do not vary with total amount invested in the plan
    - In fact, effects are the same for men vs. women, old vs. young
  - Employees should react to news driving the **largest future returns**
    - No long-term relation (5-Y locking period)
    - No difference between E S and G news



# Social News Do Not Affect Long-Term Stock Returns

	(1)	(2)	(3)	(4)	(5)
	MoM Stock return	1Y stock return	2Y stock return	3Y stock return	4Y stock return
# news E last month (ln)	-0.007 (0.010)				
# news S last month (ln)	-0.011* (0.005)				
# news G last month (ln)	0.004 (0.007)				
# news E last 12 month (ln)		0.0319 (0.041)	-0.005 (0.027)	0.021 (0.022)	0.006 (0.020)
# news S last 12 month (ln)		-0.032 (0.035)	0.022 (0.027)	0.004 (0.024)	-0.024 (0.020)
# news G last 12 month (ln)		-0.072 (0.047)	-0.029 (0.022)	-0.014 (0.017)	-0.006 (0.014)
Constant	0.557*** (0.106)	7.181*** (1.072)	4.240*** (0.488)	3.446*** (0.424)	2.561*** (0.502)
Controls	Yes	Yes	Yes	Yes	Yes
Group FE	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes
Observations	1,056	1,056	1,056	1,056	924
R <sup>2</sup>	0.37	0.63	0.78	0.82	0.82



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# Conclusion

- Employees care about the **ESG performance** of their employer when deciding to invest in its stock, in particular **local working conditions**
  - Our interpretation: ESG performance affects employees' **loyalty**
  - What matters the most : **personal benefit** dimension of ESG, rather broader externalities (E, international)
  - Potential **conflicts of interests** with “outside” shareholders (Kruger et al., 2020)
- **Contributes to our understanding on how other stakeholders react to ESG policies**
- **ESG firm policy**, in particular on the “Social” pillar, can be a powerful tool to **incentivize employees to invest**



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## — DISCLAIMER

The data used to carry out this study comes from the processing of record keeping and account keeping of AMUNDI ESR employee and pension savings accounts. These data have been analyzed anonymously for scientific, statistical or historical research purposes.

## — MENTIONS LÉGALES

### **Amundi Asset Management**

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