# Heterogeneous CSR approaches, corporate social performance and corporate financial performance

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AEA Annual Meeting 2022: Topics in Corporate Finance (G3),
08 Jan 2022

# Stakeholders demand corporate social responsibility (CSR)

- Policy makers (EEAS, 2020; EPA, 2021; European Commission, 2014, 2017)
- Socially responsible consumers (Albuquerque et al., 2019; Becker-Olsen et al., 2006; Klein et al., 2004; McWilliam & Siegel, 2001; Sen et al., 2001; Siegel & Vitaliano, 2007)
- Institutional investors (Amel-Zadeh & Serafeim, 2018; Dimson et al., 2015; Fiaschi et al. 2020; Krueger et al., 2020; Van Duuren et al., 2016)
- More CSR investments kindles academic research, which often relies on one implicit assumption

# Implicit CSR homogeneity though CSP approximations

- Empirical CSR literature uses environmental, social and governance (ESG) ratings that are an inherently linear proxy of corporate social performance (CSP) (Albuquerque et al., 2019; Awaysheh et al., 2020; Barnett & Salomon, 2012; Chenget al., 2014; Griffin & Mahon, 1997; Kim et al., 2021; Servaes & Tamayo, 2013; Waddock & Graves, 1997)
- Linearity in ESG ratings implicitly enforces CSR homogeneity
- This implicit homogeneity contrasts with both institutional theory and instrumental stakeholder theory (Donaldson & Preston, 1995; Freeman & Reed, 1983; Oliver, 1991; Suchman, 1995)

# Setup

- Cluster firms based on granular CSR information
- Segregate the promised and realised CSP of firms by means of respectively CSR reporting, policies, activities, and targets and CSR controversies and performance ranks
- Identify strategic CSR, CSR-as-insurance and corporate greenwashing firms based on their promised to realised CSP
- Estimate the social and financial performance associated with heterogeneous CSR approaches

# Relevance

- Theoretical CSR literature: Empirical verification of the theoretical models for strategic CSR, CSR-as-insurance and corporate greenwashing (Fiaschi, Giuliani, Nieri, & Salvati, 2020; Jia, Gao, & Julian, 2020.)
- Empirical CSR literature: Creating a new measure that exogenises the promised and realised CSP of firms, potentially explaining the inconclusive social to financial performance relation (Flammer, 2013, 2015; Krüger, 2015; Margolis et al., 2009; Orlitzky et al., 2003; Shahzad & Sharfman, 2017; Wang & Sarkis, 2017; Zhao & Murrell, 2016)

# Institutional and instrumental stakeholder theory

- Firms face extensive institutional pressure to pursue CSP
- Stakeholder CSR demands strongly diverge across firms (Choi & Wang, 2009; Henisz et al., 2014; Jensen, 2010) and not always financially material (Khan et al., 2016; SASB, 2021)
- This causes diverging firm responses to the institutional pressure for CSP (Oliver, 1991; Porter & Kramer, 2006; Suchman, 1995)

# Strategic CSR

- Incorporate sustainable practices into the core of their business model to meet the needs of diverse stakeholders (Burke & Logsdon, 1996; Porter & Kramer, 2006; Porter & van der Linde, 1995)
- Creating sustainable goods, or production processes (McWilliams et al., 2006; McWilliam & Siegel, 2001; Kitzmueller & Shimshack, 2012; Porter & Kramer, 2011)
- Non zero-sum game benefits through CSR sensitive consumers, creating brand loyalty (Albuquerque et al., 2019; Husted & de Jesus Salazar, 2006; Siegel & Vitaliano, 2007)
- Providing sustainable products and production processes enhance realised CSP and simultaneously disincentivize promised CSP to protect intellectual property and manage stakeholder expectations (Fatemi et al., 2018; Lyon & Maxwell, 2011)

# Corporate greenwashing

- Corporate greenwashing firms create a façade of sustainability that mainly consists of empty CSR reporting (Fatemi et al., 2018; Grewal et al., 2020; Laufer, 2003; Lyon & Maxwell,2011; Ramus & Montiel, 2005)
- Information asymmetries corporate greenwashing behaviour (Bowen & Aragon-Correa, 2014; Wu et al., 2020)
- Corporate greenwashing firms maintain a positive CSR reputation, yet in truth decouple CSR from their core business activities, resulting in excessive promised CSP that overshoots their realised CSP

# CSR-as-insurance

- CSR-as-insurance firms build moral capital buffers to mitigate the negative consequences associated with CSR shocks (Godfrey, 2005; Godfrey, 2009; Hoepner et al., 2021; Kim et al., 2021; Koh et al., 2014; Orlitzky & Benjamin, 2001)
- Also, they obtain regulatory goodwill (Burke & Logsdon, 1996; Kitzmueller & Shimshack, 2012) and deter activist attention (Dimson et al., 2015, Hoepner et al., 2018)
- CSR-as-insurance firms attain risk management benefits by complying with basic stakeholder needs, resulting in moderate promised and realised CSP
- **H1**: Firms approach strategic CSR, CSR-as-insurance and corporate greenwashing

# Heterogeneous CSR approaches and financial performance

- Strategic CSR mimics a sustainability-oriented product differentiation strategy which provides price premia by producing sustainable products and production processes (Albuquerque et al., 2019; Luo & Bhattacharya, 2009; McWilliams & Siegel, 2001; Porter & Kramer, 2011; Siegel & Vitaliano, 2007).
- CSR-as-insurance insures against the litigation consequences associated with negative CSR events (Christensen, 2016; Godfrey, 2005; Godfrey et al., 2009; Koh et al., 2014; Minor & Morgan, 2011)
- Corporate greenwashing firms face an intertemporal trade-off between temporary financial gains and future reputational damages ones uncovered (Groza, Pronschinske & Walker, 2011; Fiaschi et al., 2020; Krüger,2015)
- **H2**: Strategic CSR firms outperform CSR-as-insurance and especially corporate greenwashing in terms of financial performance

# Data

- Granular CSR information on a world-wide sample from Asset4 (466 granular aspects merged to 136 variables)
- Time span: 2003-2019
- 26,411 firm-year observations across 4,370 unique firms, representing 53% of global marketcap in 2019 (CNBC, 2019)
- 36% North America, 22% Western Europe, 21% Eastern Asia and 7% Oceania.
- Accounting and stock information from Refinitiv, CRSP, Compustat US and Compustat Global.

# Clustering: K-means

- Identifies similar CSR approaches solely based on granular CSR information
- No ESG ratings, reporting indicators or firm characteristics included
- Firm-level, separately for every industry on SASB material variables
- Scaling

# Wittkowski et al., 2004

- Non-parametric rank ordering
- Identifies CSR aspects based on weak dominance at the firm level
- CSR reporting, policy, activity, target, controversy and performance ranks
- Industry-time specific, without weighting

# Clustering CSR approaches

The CSR reporting, policy, target, activity, controversy and performance rank per cluster

| Cluster | N | Asset4 | Reporting | Policy | Target | Activity | Controversy | Performance |
|---|---|---|---|---|---|---|---|---|
| 1 | 6,953 | 6.45 (1.61) | 7.01 (2.33) | 7.47 (1.94) | 6.76 (3.59) | 7.22 (1.69) | 6.75 (3.54) | 5.01 (1.75) |
| 2 | 6,366 | 4.20 (1.61) | 4.50 (3.23) | 5.62 (1.97) | 3.15 (3.71) | 5.30 (2.01) | 7.85 (2.74) | 4.78 (2.04) |
| 3 | 13,092 | 2.57 (1.75) | 1.25 (2.52) | 3.66 (2.61) | 2.58 (3.19) | 3.15 (2.54) | 8.40 (2.38) | 5.47 (2.31) |

Internally consistent and externally divergent

# Corporate social performance

- Emissions, labour conditions, and CSR controversies
- Strategic CSR strictly superior in emissions and labour conditions
- Strategic CSR firms experience 2.10 and 6.29 times fewer CSR controversies than CSR-as-insurance and corporate greenwashing firms

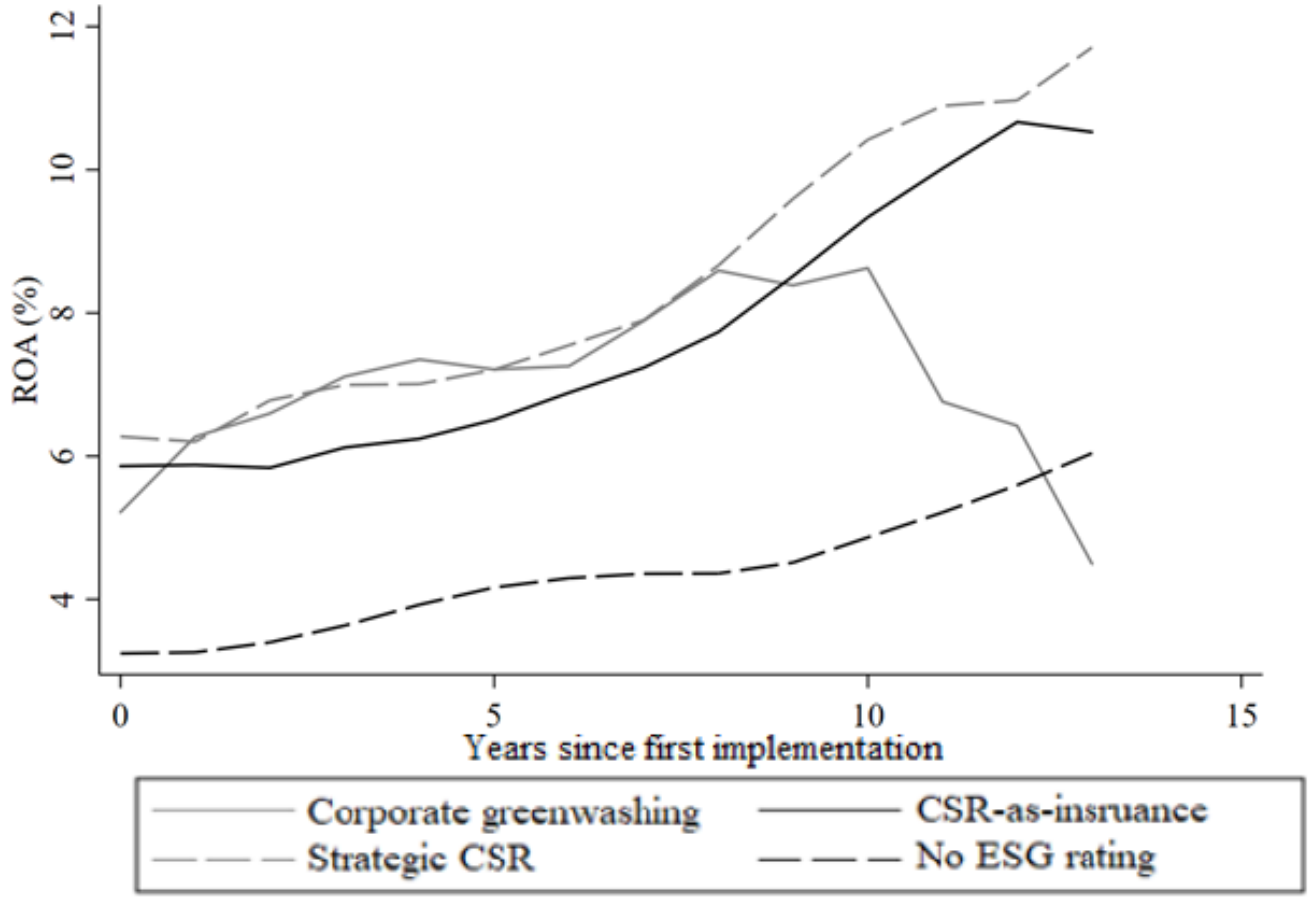
# Short-term outperformance

## Fama & French international 5-factor model

| | Strategic CSR | | CSR-as-insurance | | Corporate greenwashing | |
|---|---|---|---|---|---|---|
| Parameters | Estimates | t | Estimates | t | Estimates | t |
| Intercept | 0.001*** | 2.23 | -0.001 | 0.70 | -0.001*** | -2.74 |
| Market | 0.995*** | 8.58 | 0.943*** | 8.62 | 0.951*** | 10.53 |
| SMB | 0.479*** | 2.23 | 0.297 | 1.41 | 0.125 | 0.58 |
| HML | 0.005* | 0.05 | 0.027 | 0.14 | 0.083 | 0.33 |
| RMW | -0.075 | -0.20 | -0.013 | -0.22 | 0.091 | 0.20 |
| CMA | -0.149 | -0.47 | -0.107 | -0.44 | -0.057 | -0.30 |
| N | 125,66 | | 60,924 | | 67,873 | |
| Annualised alpha | 1.42%*** | | -0.38%*** | | -1.33%*** | |

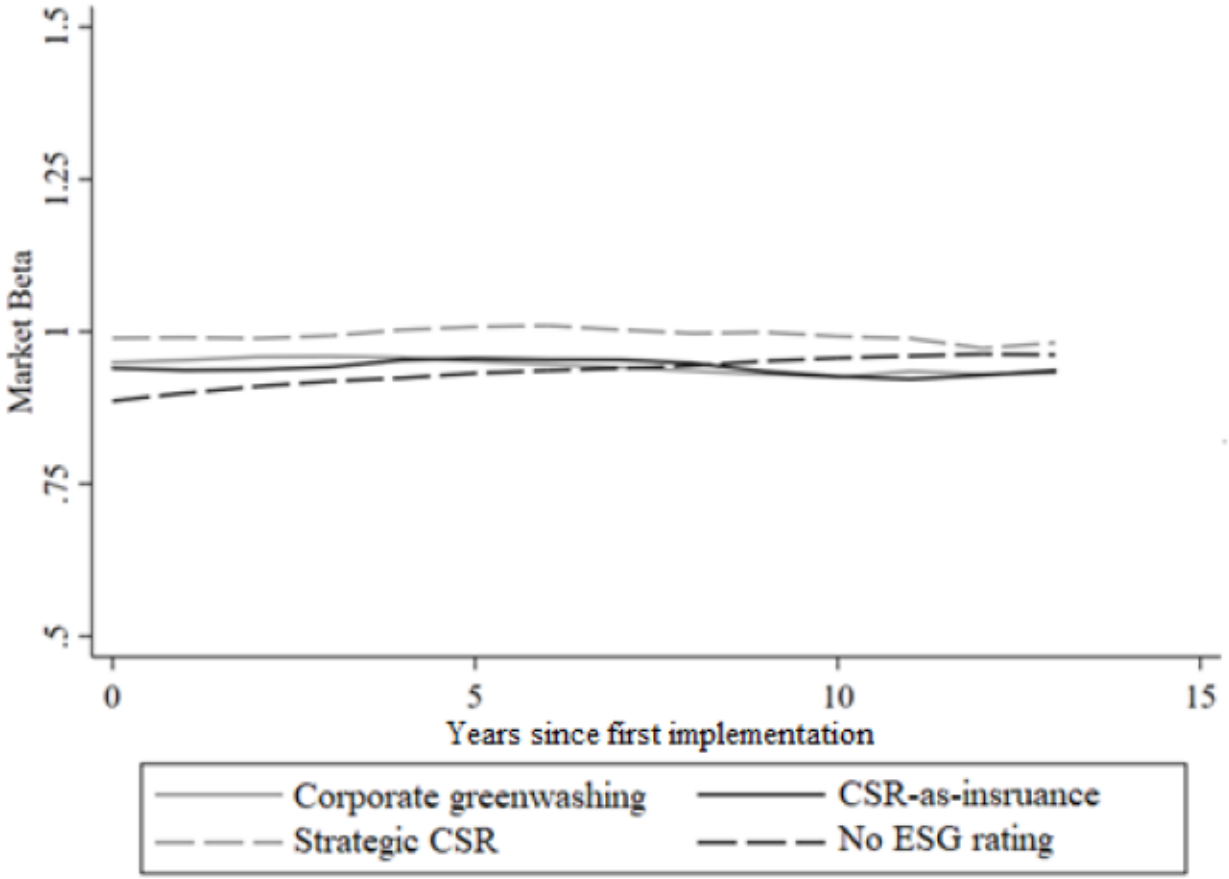
# Long-term profitability

- Strategic CSR firms outperform
- Corporate greenwashing firms strongly underperform in the long-term
- Initial starting phase not penalised



# Long-term performance: $\beta$

**Figure 2:** The market risk of strategic CSR, CSR-as-insurance, and corporate greenwashing firms for multiple horizons



# Conclusion

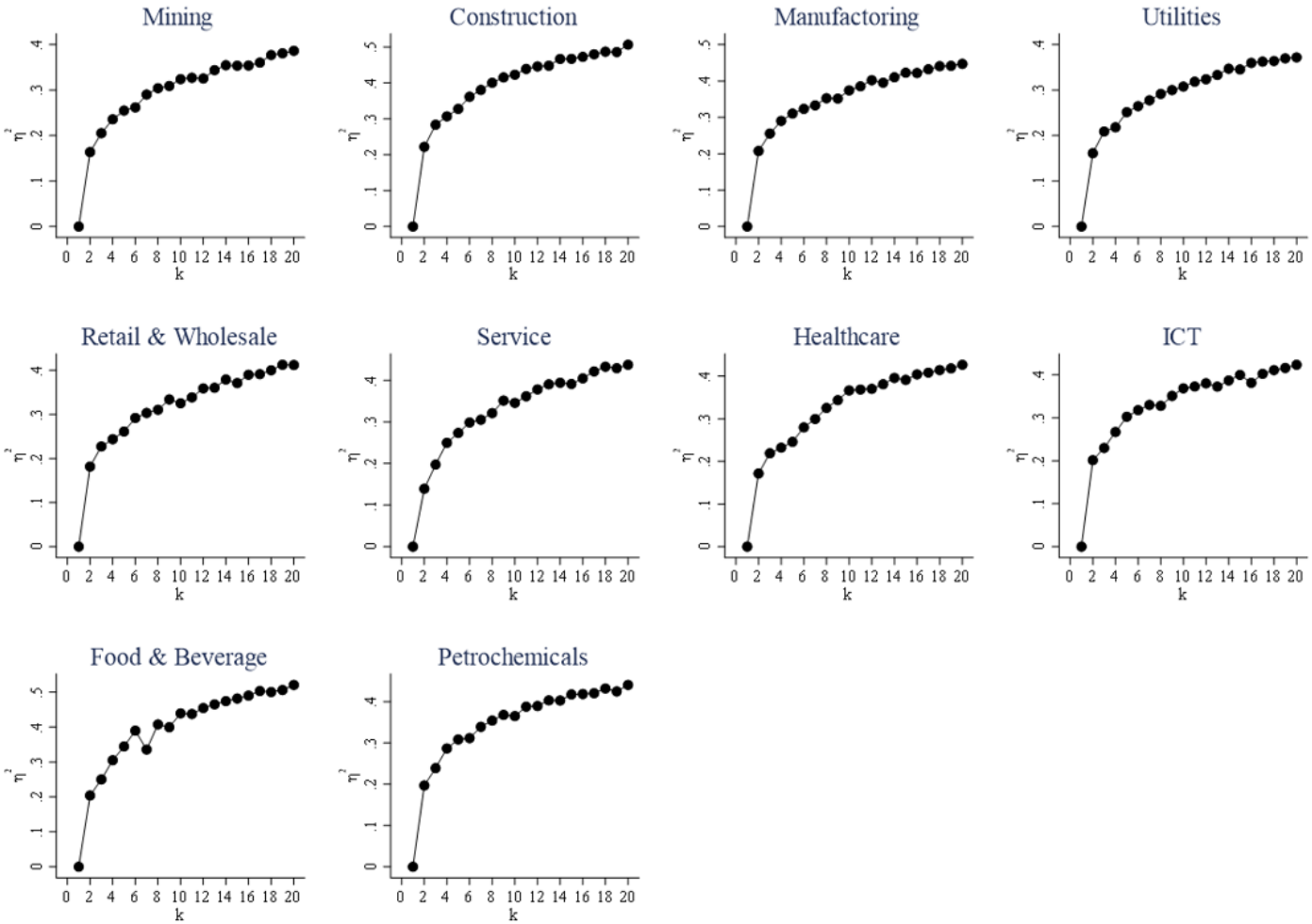
- It is not whether, but rather how firms approach CSR that determines their societal contribution and financial performance
- 50%, 24%, and 26% of the firms approach respectively strategic CSR, CSR-as-insurance and corporate greenwashing
- Strategic CSR firms outperform in both financial and social performance, whereas corporate greenwashing firms underperform

# Implications

- Empirical CSR literature: we provide a plausible explanation for the diverging findings regarding the social to financial performance relation.
- Theoretical CSR literature: we verify the theoretical models for strategic CSR, CSR-as-insurance and corporate greenwashing on a global scale
- Theoretical contribution: we contribute to institutional theory and instrumental stakeholder theory by showing that firms heterogeneously approach CSR and that those who most consider stakeholder needs attain the largest benefits
- Practical implications: Managers and investors should pursue realised CSP, rather than provide empty promises. However, initial target setting is not penalised as long as these targets are materialised in the medium-run.

# Clustering: $\eta_k^2$

$$\eta_k^2 = 1 - \frac{\sum_{j=1}^{j=k} WSS_j}{TSS}$$



# US subsample

- Highly similar to world-wide sample

| Cluster | N | Asset4 | Reporting | Policy | Target | Activity | Controversy | Performance |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,310 | 6.42 (1.60) | 6.69 (3.38) | 7.79 (2.26) | 5.81 (4.14) | 7.46 (1.80) | 6.60 (3.78) | 4.79 (2.68) |
| 2 | 1,358 | 3.72 (1.51) | 2.27 (3.53) | 6.49 (2.29) | 2.01 (3.20) | 5.37 (2.19) | 7.77 (2.94) | 5.01 (2.83) |
| 3 | 4,007 | 2.54 (1.56) | 0.50 (1.77) | 3.76 (2.62) | 1.23 (2.13) | 3.10 (2.72) | 8.06 (2.70) | 5.55 (2.67) |

# Industry snapshot

The clustering results hold for multiple industries

**Panel H:** Healthcare:

| Cluster | N | Asset4 | Reporting | Policy | Target | Activity | Controversy | Performance |
|---|---|---|---|---|---|---|---|---|
| 1 | 303 | 6.29 (1.48) | 7.41 (1.75) | 7.06 (1.43) | 5.99 (3.99) | 8.25 (1.09) | 7.32 (3.11) | 4.64 (1.67) |
| 2 | 393 | 4.06 (1.63) | 3.73 (3.42) | 5.77 (1.54) | 2.03 (3.29) | 5.68 (1.69) | 7.89 (2.64) | 4.49 (2.47) |
| 3 | 650 | 2.47 (1.55) | 0.72 (2.18) | 3.77 (2.40) | 0.92 (1.99) | 3.28 (2.73) | 8.49 (2.13) | 5.46 (2.38) |

**Panel I:** ICT:

| Cluster | N | Asset4 | Reporting | Policy | Target | Activity | Controversy | Performance |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,316 | 6.41 (1.60) | 7.05 (2.39) | 7.31 (1.96) | 5.98 (3.65) | 7.07 (1.23) | 4.92 (2.10) | 4.53 (1.65) |
| 2 | 1,153 | 3.97 (1.40) | 3.63 (3.35) | 5.59 (1.97) | 1.62 (2.72) | 5.27 (1.48) | 5.29 (1.53) | 4.72 (2.32) |
| 3 | 2,048 | 2.49 (1.60) | 0.71 (2.00) | 3.36 (2.14) | 1.07 (1.87) | 2.80 (2.39) | 5.50 (1.77) | 5.73 (2.56) |

# Summary stats: Country

**Table 2:** Domicile decomposition.

Table 2 decomposes the corporations by domicile, considering the firm-year observations across the sample of 2003 to 2019.

| Country | N | Country | N | Country | N |
|---|---|---|---|---|---|
| Argentina | 38 | Indonesia | 126 | Philippines | 61 |
| Australia | 1,943 | Iman | 21 | Papua New Guinea | 4 |
| Austria | 123 | India | 517 | Poland | 230 |
| Belgium | 188 | Ireland | 226 | Portugal | 69 |
| Bahrain | 2 | Israel | 89 | Qatar | 15 |
| Bermuda | 333 | Italy | 288 | Romania | 21 |
| Brazil | 361 | Japan | 3,479 | Russia | 117 |
| Canada | 865 | Jersey | 39 | Saudi Arabia | 31 |
| Chili | 109 | Kazakhstan | 1 | Singapore | 249 |
| China | 473 | Kenia | 1 | Slovenia | 2 |
| Colombia | 25 | Korea | 403 | Spain | 317 |
| Cayman Islands | 339 | Kuwait | 15 | Sweden | 450 |
| Cyprus | 18 | Luxembourg | 73 | Switzerland | 483 |
| Czechia | 8 | Morocco | 5 | Thailand | 116 |
| Germany | 767 | Mexico | 114 | Turkey | 56 |
| Denmark | 295 | Malta | 4 | Taiwan | 602 |
| Egypt | 21 | Mauritius | 5 | Uganda | 1 |
| Finland | 256 | Malaysia | 212 | United Arab Emirates | 12 |
| France | 851 | Netherlands | 327 | United Kingdom | 2,379 |
| Faroe Islands | 1 | Norway | 162 | Unites States | 6,895 |
| Guernsey | 3 | New Zealand | 200 | Virgin Islands | 3 |
| Gibraltar | 1 | Oman | 9 | South Afrika | 583 |
| Greece | 97 | Pakistan | 4 | Yemen | 37 |
| Hong Kong | 191 | Panama | 11 | Zimbabwe | 9 |
| Hungary | 26 | Peru | 32 | **Total** | 26,411 |

# Summary stats: Industry

**Table 3:** Industry decomposition

Table 3 discloses information about the industries for each of the firm-year observations in our sample. The industries are chosen to match the available information from SIC and NAICS classifications from Refinitiv, Compustat US, Compustat Global and FactSet. The industries are aggregated to a sector level to accommodate the industry classification presented by the SASB Materiality map (SASB, 2021).

| Industry | N |
|---|---|
| Mining | 2,419 |
| Construction | 903 |
| Manufacturing non-food, non-petrochemicals | 4,419 |
| Utility | 3,943 |
| Retail & Wholesale | 2,766 |
| Service | 1,693 |
| Healthcare | 1,340 |
| ICT & ICT equipment | 4,506 |
| Manufacturing food | 1,196 |
| Manufacturing petrochemicals | 3,226 |
| **Total** | 26,411 |

# Regional divergence

- The financial performance of CSR approaches differs across regions
- This divergence can be explained by different regulation (European Commission, 2014; EPA, 2021), difference in investor preferences (Krueger et al., 2020) or different consumer utility (Kitzmueller & Shimshack, 2012)

| | Corporate greenwashing | Strategic CSR | CSR-as-insurance |
|---|---|---|---|
| Regional subsets: | | | |
| United States | -4.50%*** | -0.14% | -1.61%*** |
| Europe | -1.02%*** | 1.08%*** | -1.46%*** |
| Asian-Pacific | 0.68%*** | 2.46%*** | 0.66%*** |
| Japan | -0.92%*** | 1.34%*** | 1.16%*** |
| North-America (non-US) | 0.16% | 4.46%*** | 0.13%*** |
| Other parts of the world | -0.44%*** | 5.74%*** | 1.52%*** |

# Industry specificity

Strategic CSR more rewarding for consumer oriented diversifiable goods markets (as in line with McWilliam & Siegel, 2001, Becker-Olsen et al., 2006; Siegel & Vitaliano, 2007)

| | Corporate greenwashing | Strategic CSR | CSR-as-insurance |
|---|---|---|---|
| Industry subsets: | | | |
| Mining | -1.37%*** | 0.60%*** | -4.00%*** |
| Construction | -0.74%*** | -1.36%*** | 1.65%*** |
| Non-food, non-petrochemical Manufacturing | -0.77%*** | 0.38%*** | -0.66%*** |
| Utilities | -2.72%*** | -0.02% | -0.70%*** |
| Retail & Wholesale | -1.81%*** | 0.37%*** | -0.94%*** |
| Service | -0.18% | 2.17%*** | -2.70%*** |
| ICT | 4.78%*** | 4.35%*** | 1.50%*** |
| Healthcare | -2.04%*** | 2.95%*** | 0.55%*** |
| Manufacturing food | -1.76%*** | 4.16%*** | 0.02% |
| Manufacturing petrochemicals | -1.75%*** | 2.63%*** | -1.07%*** |

# Economies of scale

The largest firms have the best returns due to economies of scale (McWilliam & Siegel, 2001; Branikas et al., 2021), conditional on their CSR motive

| | Corporate greenwashing | Strategic CSR | CSR-as-insurance |
|---|---|---|---|
| Size subsets: | | | |
| Smallest 20% | -0.30%** | -0.34%*** | -0.37%*** |
| Second quintile | -0.73%*** | -0.62%*** | -0.77%*** |
| Third quintile | -1.22%*** | -0.29%*** | -0.52%*** |
| Fourth quintile | -1.63%*** | 0.94%*** | -0.34%*** |
| Largest 20% | -2.62%*** | 7.42%*** | 0.16%*** |

# Frequency of CSR approaches

The frequency of CSR approaches