

FOUNDATION OWNERSHIP AND FIRM PERFORMANCE

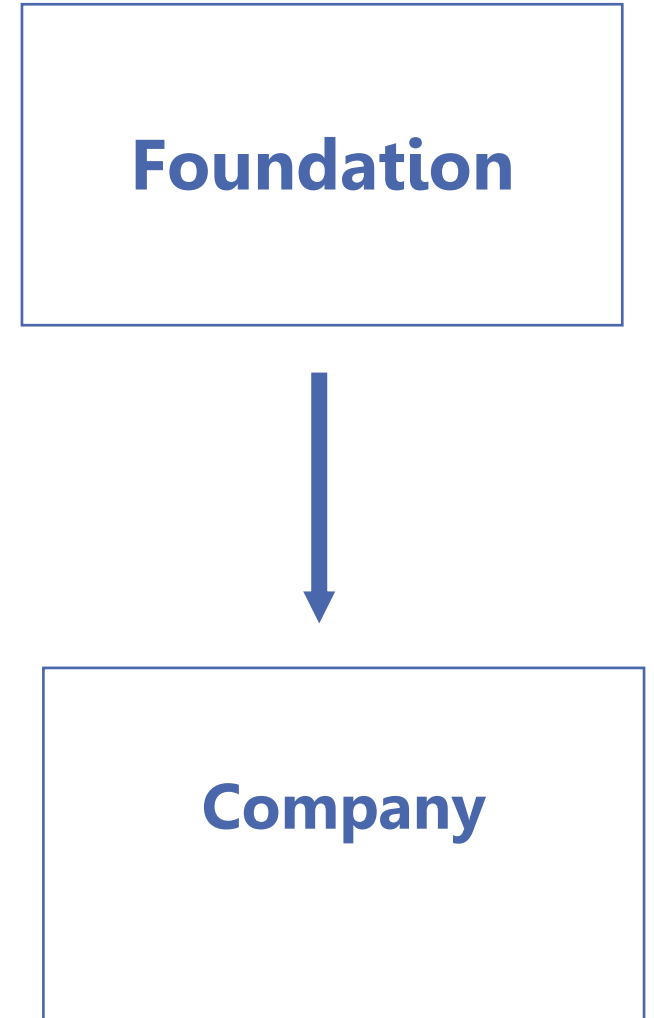
INTERNATIONAL EVIDENCE



<https://www.enterprisefoundations.dk/>

Enterprise Foundations

- Foundations that own companies (at least 20 % of voting rights in this study)
- Governed by a foundation board according to a charter and purpose decided by the founder
- Typical goals
 - Company survival
 - Philanthropy
 - Founding family support
- Supervision by a foundation authority
- Created by donation



20 Foundation-Owned Companies around the World

- A. P. Møller- Mærsk - Denmark
- Armani - Italy
- Bertelsmann-Germany
- Robert Bosch – Germany
- CaixaBank - Spain
- Carl Zeiss – Germany
- Carlsberg – Denmark
- The Guardian – UK
- Hershey – USA
- Inter Ikea – Switzerland
- Investor (Wallenberg) – Sweden
- Kavli – Norway
- Kuehne + Nagel - Switzerland
- Lloyds Register – UK
- Mahle – Germany
- Norske Veritas (DNV GL) – Norway
- Novo Nordisk - Denmark
- Pierre Fabre – France
- Rolex – Switzerland
- Tata Sons – India

| Country | Number of firms | % of Market Cap |
|------------------------|------------------------|------------------------|
| Denmark | 35 | 63,0% |
| Sweden | 32 | 18,9% |
| India | 27 | 6,1% |
| Germany | 22 | 3,8% |
| Austria | 17 | 26,1% |
| United States | 11 | 1,1% |
| Norway | 9 | 7,9% |
| Spain | 9 | 0,2% |
| Switzerland | 8 | 5,0% |
| Netherlands | 7 | 14,2% |
| Luxembourg | 6 | 61,7% |
| Belgium | 5 | 0,7% |
| Finland | 5 | 3,0% |
| Italy | 4 | 6,3% |
| Pakistan | 3 | 0,0% |
| Poland | 3 | 0,0% |
| Brazil | 3 | 0,1% |
| China | 3 | 0,1% |
| Chile | 3 | 1,6% |
| United Kingdom | 2 | 0,7% |
| Turkey | 2 | 3,5% |
| Croatia | 2 | 1,0% |
| Bosnia and Herzegovina | 2 | 0,0% |
| France | 1 | 0,0% |
| | | |
| Total | 237 | 2,4% |

Country breakdown of listed FoFs

**1/3 Nordic
3/4 European**

1% of Global Market Value

And counting....

Competing Theories

Agency Theory View

- Foundation-owned companies will underperform, because
 - Foundations (non-profits) have little or no profit motive (Fama and Jensen 1983)
 - Foundation-owned firms cannot (fully) diversify ownership and risk (Fama and Jensen 1983)
 - Foundation-owned companies are not disciplined by the market for corporate control (Manne 1965)

Purpose view

- Foundation owned companies benefit from
 - Absence of profit incentives (Hansmann 1980)
 - Greater social trust (Mayer 2020)
 - Long-term ownership commitment (Thomsen et al. 2018)
 - Purposeful ownership (British Academy 2018, 2019, 2021; Mayer 2019, 2020)
 - Motivated employees (Henderson and van den Steen 2015)
 - Virtual ownership (Hansmann and Thomsen 2021)

Note: Two types of enterprise foundations

- Charitable foundations with a philanthropic purpose (e.g. the Carlsberg foundation)
- Family foundations: support a founding family (e.g. Austrian private foundations or Anheuser Busch Foundation)
- Both may or may not have a formal company purpose

Competing Theories of Foundation Ownership

Standard Agency Theory View

- Foundation-owned companies will underperform, because
 - Foundations (non-profits) have little or no profit motive (Fama and Jensen 1983)
 - Foundation-owned firms cannot (fully) diversify ownership and risk (Fama and Jensen 1983)
 - Foundation-owned companies are not disciplined by the market for corporate control (Manne 1965)

Purpose view

- Foundation owned companies benefit from
 - Absence of profit incentives (Hansmann 1980)
 - Trustworthiness (Mayer 2020)
 - Purposeful ownership (British Academy 2018, 2019, 2021; Mayer 2019, 2020)
 - Motivated employees (Henderson and van den Steen 2015)
 - Long-term ownership commitment (Thomsen et al. 2018)

Data

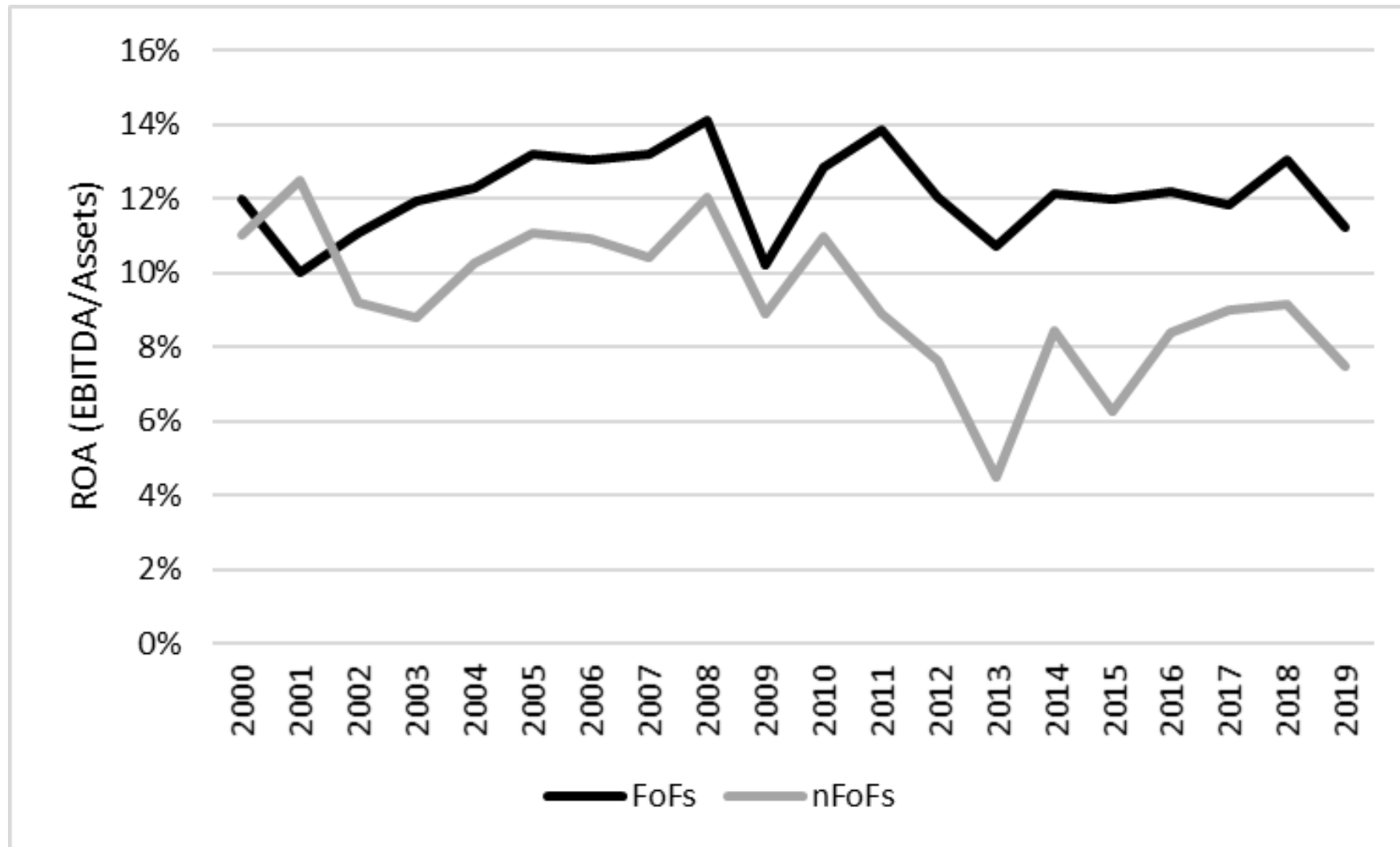
- All publicly listed foundation-owned firms around the world (that we could find)
- Two control groups: family-owned and investor-owned companies in the same industry and size class
- Final sample: Unbalanced panel of 318 publicly listed firms (106 FoFs, 106 Family Firms and 106 Investor-owned firms) and 3000+ firm-year observations
- Time period 2000 - 2020
- Financial information from Bloomberg etc.

Performance measures

- Standard finance measures: ROA, firm value, shareholder returns, sales growth...
- Acquisition performance: Market reactions to acquisitions
- Sustainability: ESG ratings

Financial Performance

Profitability of Foundation-Owned Forms vs Control Group



Univariate Analysis

Parametric test

| Variables | <u>Number of Observations</u> | | <u>Means</u> | | <u>Differences in means</u> |
|--------------|-------------------------------|-------|--------------|--------|-----------------------------|
| | FOFs | nFoFs | FOFs | nFoFs | FoF-nFoF |
| ROA | 1,674 | 3,691 | 11.84% | 9.47% | 2.37%*** |
| Firm Value | 1,493 | 3,415 | 1.66 | 1.36 | 0.30*** |
| Stock return | 1,323 | 3,183 | 19.45% | 16.49% | 2.96%** |
| Growth | 1,585 | 3,514 | 7.69% | 7.54% | 0.14% |

Non-parametric test

| Variables | <u>Number of Observations</u> | | Z | <u>Rank Sum</u> | | <u>Differences in rank sum</u> |
|--------------|-------------------------------|-------|--------|-----------------|-----------|--------------------------------|
| | FOFs | nFoFs | | FOFs | nFoFs | nFoFs-FoFs |
| ROA | 1,674 | 3,691 | -8.219 | 4923358 | 9470937 | 4547579*** |
| Firm Value | 1,493 | 3,415 | -5.707 | 3925193.5 | 8121492.5 | 4196299*** |
| Stock return | 1,323 | 3,183 | -2.219 | 3069638 | 7084633 | 4014995** |
| Growth | 1,585 | 3,514 | -1.2 | 4100123 | 8902327 | 4802204 |

Regression results (Hypothesis 1): FoFs vs nFoFs

| VARIABLES | (1) ROA | (2) Firm Value | (3) Stock return | (4) Sales Growth | (5) ROA | (6) Firm Value | (7) Stock return | (8) Sales Growth |
|---------------------|-------------------------|-----------------------|------------------------|-------------------------|---------------------------|-------------------------|-------------------------|----------------------------|
| Foundation-o. | 0.00666 (0.0170) | 0.241 (0.252) | -0.0151 (0.0199) | -0.00902 (0.0129) | 0.0235** (0.0109) | 0.354** (0.172) | -0.00575 (0.0159) | -0.00914 (0.00910) |
| Firm size | 0.0117*** (0.00438) | -0.00384 (0.0581) | -0.00896* (0.00493) | -0.00387 (0.00394) | 0.0101*** (0.00378) | -0.0341 (0.0411) | -0.0108*** (0.00407) | -0.00556* (0.00321) |
| Leverage | -0.0982*** (0.0356) | -0.0987 (0.575) | 0.0367 (0.0626) | 0.0256 (0.0318) | -0.114*** (0.0304) | -0.414 (0.501) | -0.00470 (0.0567) | 0.0279 (0.0309) |
| PPE/Sales | 0.00491 (0.00930) | -0.125 (0.0842) | -0.00632 (0.0302) | -0.0255 (0.0249) | 0.00395 (0.00945) | -0.207*** (0.0699) | -0.0119 (0.0221) | -0.0265 (0.0188) |
| R&D/Sales | -0.143*** (0.0236) | 0.528*** (0.138) | -0.00897 (0.0320) | 0.0163 (0.0182) | -0.113*** (0.0330) | 0.462*** (0.144) | -0.0103 (0.0236) | 0.0106 (0.0137) |
| Firm Age | -3.65e-05 (0.000167) | -0.00374 (0.00253) | 0.000308 (0.000260) | -0.000192 (0.000163) | -0.000350** (0.000135) | -0.00439** (0.00197) | 7.72e-05 (0.000216) | -0.000338*** (0.000125) |
| Growth | 0.0306* (0.0172) | 0.551*** (0.178) | 0.239*** (0.0527) | | 0.0438*** (0.0167) | 0.599*** (0.185) | 0.259*** (0.0522) | |
| Intangibility | -0.0347 (0.0301) | -0.780 (0.522) | -0.0137 (0.0505) | 0.0811* (0.0425) | -0.0147 (0.0184) | -0.691* (0.353) | -0.0140 (0.0446) | 0.0327 (0.0335) |
| Industry average | | | | | 0.274* (0.156) | 0.774*** (0.142) | 0.420** (0.171) | 0.612*** (0.182) |
| Country average | | | | | 0.825*** (0.110) | 0.772*** (0.111) | 0.719*** (0.181) | 0.804*** (0.181) |
| Constant | 0.0961*** (0.0275) | 0.761** (0.318) | -0.0225 (0.0569) | 0.0919*** (0.0339) | -0.00749 (0.0355) | -0.273 (0.388) | -0.0728 (0.0595) | -0.0685* (0.0357) |
| Time (year) effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Country effects | Yes | Yes | Yes | Yes | No | No | No | No |
| Industry effects | Yes | Yes | Yes | Yes | No | No | No | No |
| Observations | 3,123 | 3,035 | 2,954 | 3,128 | 3,141 | 3,053 | 2,972 | 3,146 |
| R-squared | 0.527 | 0.419 | 0.264 | 0.163 | 0.426 | 0.333 | 0.244 | 0.141 |

- We separately compared the performance of FoFs with investor-owned and family-owned firms with qualitatively similar results

Regression results (Hypothesis 2): Charitable vs. Private Foundations

| VARIABLES | (1) ROA | (2) Firm Value | (3) Stock return | (4) Growth |
|-----------------------|-------------------------|-----------------------|-------------------------|------------------------|
| Charitable foundation | 0.0316 (0.0272) | 0.191 (0.576) | 0.119** (0.0547) | -0.0606 (0.0391) |
| Firm size | 0.00799 (0.00543) | 0.136 (0.147) | -0.0384*** (0.00932) | 0.0110** (0.00535) |
| Leverage | -0.0308 (0.0450) | 0.809 (1.086) | -0.162 (0.122) | -0.0214 (0.0896) |
| PPE/Sales | -0.0290*** (0.00960) | -0.270 (0.247) | -0.0519 (0.0345) | -0.0618** (0.0292) |
| R&D/Sales | -0.309*** (0.115) | 0.410 (2.841) | 0.261** (0.123) | -0.137* (0.0706) |
| Firm Age | -1.28e-05 (0.000284) | -0.00881 (0.00686) | 0.000396 (0.000435) | 0.000199 (0.000340) |
| Growth | 0.0490*** (0.0137) | 0.723** (0.296) | 0.501*** (0.152) | |
| Intangibility | -0.157*** (0.0455) | -3.287*** (1.235) | -0.0724 (0.117) | 0.0306 (0.0527) |
| Constant | -0.0290 (0.0443) | -2.683** (1.249) | 0.0520 (0.122) | 0.0493 (0.0749) |
| Time (year) eff. | Yes | Yes | Yes | Yes |
| Country effects | Yes | Yes | Yes | Yes |
| Industry effects | Yes | Yes | Yes | Yes |
| Observations | 837 | 807 | 779 | 837 |
| R-squared | 0.618 | 0.578 | 0.359 | 0.323 |

Robustness checks

- Heckman (1979) two-step treatment effects model
- (Bad) Instrumental variable regressio
- Subsamples
Enterprise foundations with majority control (e.g. more than 50% control)
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- Acquisition performance (event studies)
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- Qualitatively similar results

Acquisition Performance

Stock Market Reactions to Acquisitions

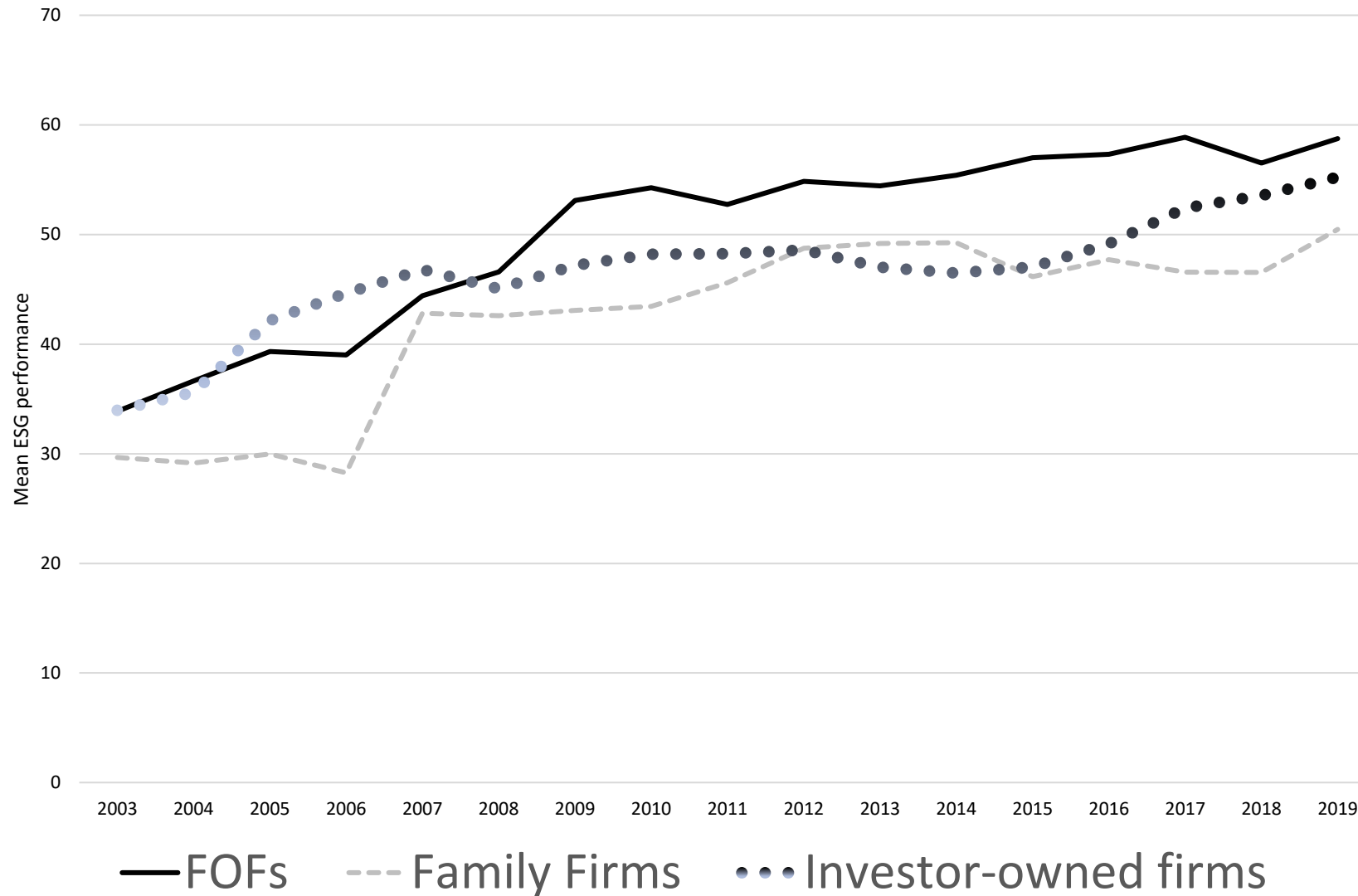
- We use an event study method to test the robustness of the results since an event study can help to identify a causal impact of foundation ownership on performance.
- Our events of interest are announcements by foundation-owned companies and non-foundation-owned control companies to acquire controlling equity stakes in target firms.
- We use an estimation window of 250 days $[-11, -260]$ to obtain the OLS parameters.
- We apply four event windows namely, $[-2,2]$, $[-5,5]$, $[0,1]$ and $[0,2]$ in our study in the calculation of cumulative abnormal returns (CARs).
- The events occur between 2012 and 2020 and they cover 469 announcements from 182 sample firms (both FoFs and nFoFs)
- The data on corporate acquisitions is drawn from BvD Zephyr.
- The abnormal returns are estimated using the market model following Brown and Warner (1980, 1985) surrounding the days of the announcement, where the benchmark for the stock return of firm i is the return on the respective domestic market index.

Regression results (market reactions to acquisitions)

| VARIABLES | (1) CAR[-5,5] | (2) CAR[-5,5] | (3) CAR[-2,2] | (4) CAR[-2,2] | (5) CAR[0,1] | (6) CAR[0,1] | (7) CAR[0,2] | (8) CAR[0,2] |
|--------------------------|------------------------|-----------------------|-------------------------|------------------------|------------------------|--------------------------|------------------------|-------------------------|
| Foundation-o. | -0.0157 (0.0172) | | -0.0113 (0.00753) | | -0.00831 (0.0106) | | -0.0134 (0.0119) | |
| Charitable foundation | | -0.0399** (0.0181) | | -0.0608*** (0.0163) | | -0.0219* (0.0118) | | -0.0197* (0.0110) |
| Firm size | 0.00730* (0.00441) | 0.00311 (0.00373) | -0.00139 (0.00266) | -0.00542 (0.00526) | 0.00302 (0.00307) | -0.00654*** (0.00210) | 0.00330 (0.00343) | -0.00408* (0.00221) |
| Leverage | 0.0285 (0.0495) | -0.00973 (0.0365) | 0.0696** (0.0303) | -0.0201 (0.0386) | 0.0647* (0.0351) | 0.0137 (0.0209) | 0.0551 (0.0376) | 0.00223 (0.0214) |
| Growth | -0.00380 (0.0129) | -0.0127 (0.0474) | -0.00154 (0.0104) | -0.0569 (0.0343) | -0.000753 (0.00908) | 0.0158 (0.0306) | 0.000778 (0.0105) | 0.0275 (0.0268) |
| Cash Payment | 0.0208* (0.0117) | -0.00304 (0.0129) | 0.00388 (0.00807) | -0.00304 (0.0102) | 0.00856 (0.00699) | -0.00344 (0.00729) | 0.0120 (0.00811) | -0.00175 (0.00815) |
| Stock Payment | 0.0159 (0.0249) | -0.00520 (0.0340) | 0.0179 (0.0232) | 0.00383 (0.0416) | 0.000993 (0.0165) | -0.0145 (0.0177) | 0.00159 (0.0201) | -0.0106 (0.0183) |
| Listed dummy | 0.0106 (0.0118) | 0.0109 (0.0157) | 0.0176* (0.0101) | 0.0105 (0.0121) | 0.0106 (0.00843) | 0.0114 (0.00718) | 0.0128 (0.00883) | 0.00997 (0.00650) |
| Firm age | 2.81e-05 (0.000182) | | -7.91e-05 (0.000126) | | 0.000137 (0.000115) | | 0.000128 (0.000126) | |
| Sic diff. | -0.0212** (0.00921) | 0.00207 (0.0117) | -0.00159 (0.00761) | 0.0263** (0.0107) | -0.00707 (0.00660) | 0.0144*** (0.00523) | -0.00318 (0.00721) | 0.0133** (0.00522) |
| Deal size | 0.0603 (0.725) | 5.769 (4.140) | -0.366 (0.435) | 2.969 (2.564) | 0.327 (0.388) | 4.220** (1.912) | -0.694 (0.442) | 3.339** (1.611) |
| Prior stake | 0.0201 (0.0151) | -0.0111 (0.0332) | 0.00298 (0.0139) | -0.0270** (0.0133) | 0.0148 (0.0118) | -0.0227*** (0.00602) | 0.0201 (0.0143) | -0.0289*** (0.00519) |
| Industry avg. | | 0.597** (0.274) | 1.589*** (0.356) | 0.180 (0.255) | | 0.167 (0.116) | | 0.243* (0.126) |
| Country avg. | | -0.00135 (0.345) | 0.924** (0.427) | | | -0.119 (0.190) | | -0.135 (0.170) |
| Constant | -0.466 | 0.0192 | 0.101 | 0.0726 | -0.436* | 0.0625** | -0.316 | 0.0424 |
| Country effects | Yes | No | No | Yes | Yes | No | Yes | Yes |
| Year effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry effects | Yes | No | No | No | Yes | No | Yes | Yes |
| Observations | 2,431 | 748 | 1,105 | 340 | 442 | 136 | 663 | 204 |
| R-squared | 0.435 | 0.296 | 0.351 | 0.488 | 0.501 | 0.428 | 0.500 | 0.394 |

Sustainability (ESG ratings)

Sustainability - ESG ratings



ESG Regressions

| VARIABLES | (1) ESG | (2) ENV | (3) SOC | (4) GOV |
|------------------|----------------------|----------------------|----------------------|----------------------|
| FOWN | 10.05** (4.576) | 9.853* (5.611) | 13.08*** (4.428) | 5.501 (6.271) |
| Leverage | 1.528 (8.752) | -6.232 (14.15) | -0.00327 (10.64) | 7.501 (11.30) |
| Firm size | 9.548*** (1.064) | 10.09*** (1.580) | 9.985*** (1.158) | 8.795*** (1.525) |
| Cash holdings | -37.26*** (11.50) | -52.46*** (16.03) | -39.64*** (12.64) | -20.06 (15.82) |
| Firm value | 0.833 (1.053) | 1.117 (1.387) | 0.274 (1.274) | 1.097 (1.464) |
| R&D/Sales | 38.09 (25.53) | 29.02 (28.63) | 48.91 (32.04) | 21.04 (24.90) |
| ROA | 26.16* (15.01) | 45.21* (26.57) | 36.74** (17.70) | -9.654 (18.73) |
| Constant | -73.69*** (13.08) | -73.18*** (19.15) | -77.78*** (13.37) | -68.60*** (17.67) |
| Time (year) eff. | Yes | Yes | Yes | Yes |
| Country effects | Yes | Yes | Yes | Yes |
| Industry effects | Yes | Yes | Yes | Yes |
| Observations | 868 | 868 | 868 | 868 |
| R-squared | 0.666 | 0.612 | 0.645 | 0.483 |

Other sustainability measures

| VARIABLES | (1) Employee satisfaction | (2) CO2 Emmissions Intensity | (3) Waste Recycling ratio | (4) LTIR (Employees) | (5) LTIR (All Contractors) |
|------------------|------------------------------|---------------------------------|------------------------------|-------------------------|-------------------------------|
| FOWN | 4.282** (1.925) | -59.11** (25.09) | 0.0547** (0.0229) | -1.611*** (0.499) | -0.828** (0.402) |
| Firm Size | -0.272 (0.768) | -1.559 (9.002) | -0.0157* (0.00834) | -0.791*** (0.133) | -0.675*** (0.148) |
| Leverage | 5.223 (5.260) | 117.4 (88.14) | -0.139** (0.0619) | 1.060 (1.100) | 1.884* (1.118) |
| Firm value | -0.395 (0.490) | -18.34** (8.829) | 0.0412*** (0.0105) | -0.585*** (0.167) | -0.474*** (0.152) |
| ROA | 34.73*** (10.26) | -7.855 (203.3) | 0.393** (0.159) | 8.113*** (2.036) | 8.353*** (2.102) |
| Cash holdings | -2.882 (7.690) | -334.1*** (98.33) | -0.574*** (0.0846) | -5.579*** (1.832) | -6.008*** (2.307) |
| Constant | 45.96*** (6.002) | 335.3*** (92.89) | -0.142 (0.144) | 29.12*** (10.17) | 22.22*** (4.299) |
| Time (year) eff. | Yes | Yes | Yes | Yes | Yes |
| Country effects | Yes | Yes | Yes | Yes | Yes |
| Industry effects | Yes | Yes | Yes | Yes | Yes |
| Observations | 311 | 1,395 | 864 | 801 | 884 |
| R-squared | 0.582 | 0.596 | 0.621 | 0.614 | 0.575 |

ESG Scores: Charitable vs Family Foundations

| VARIABLES | (1) ESG | (2) ENV | (3) SOC | (4) GOV |
|------------------|----------------------|----------------------|----------------------|---------------------|
| Charitable f. | 4.632 (4.899) | 19.57** (7.412) | 2.254 (8.046) | -6.377 (11.24) |
| Leverage | -28.13 (17.27) | -37.08* (20.60) | -23.93 (20.76) | -21.97 (23.32) |
| Firm size | 6.408*** (1.809) | 6.090** (2.489) | 7.109*** (2.242) | 5.835*** (2.049) |
| Cash holdings | -25.29* (14.42) | -67.62*** (17.04) | -19.67 (21.22) | 2.423 (24.54) |
| Firm value | 1.463 (1.303) | 2.267 (1.375) | 1.470 (1.683) | 0.104 (1.889) |
| R&D/Sales | -50.51*** (16.55) | -50.47** (22.74) | -51.11*** (18.02) | -40.51 (35.71) |
| ROA | 0.521 (18.86) | -11.96 (21.86) | 20.01 (21.35) | -17.05 (30.21) |
| Constant | -23.80* (14.05) | -25.09 (20.09) | -34.94* (18.25) | -9.840 (18.71) |
| Time (year) eff. | Yes | Yes | Yes | Yes |
| Country eff. | Yes | Yes | Yes | Yes |
| Industry eff. | Yes | Yes | Yes | Yes |
| Observations | 436 | 436 | 436 | 436 |
| R-squared | 0.756 | 0.751 | 0.707 | 0.587 |

Conclusion

- Foundation-owned firms have broadly similar financial performance
- Lower acquisition performance in companies owned by charitable foundations
- Good esg performance – particularly compared to family-owned firms

So what?

- Enterprise foundation law
- Value of responsible long-run ownership => “Stewardship”
 - relevant for family businesses, coops and (at times) state-owned enterprises
- Similarities with purposeful companies
 - => company purpose needs not harm financial performance

TAK !



Taxation

Taxation of founders

- Founders typically escape estate taxes by donating to a foundation (wealth taxes, capital gains taxes, inheritance taxes)

Taxation of Foundations

- Charitable Foundations are typically tax exempt (or can deduct donations)
- Enterprise foundations are taxed on their business activity (corporate income taxes)

Bottom line

- Enterprise foundations pay very little tax at the foundation level
- Foundation-owned companies pay normal corporate taxes
- Typically no private tax incentive: (family) donation recipients pay income tax

Bottom line:



Steen Thomsen and Nikolaos Kavadis (2022), "Enterprise Foundations: Law, Taxation, Governance, and Performance", Annals of Corporate Governance: Vol. 6: No. 4, pp 227-333.
<http://dx.doi.org/10.1561/109.00000031>

DIF in DIFs test on ESG ratings

Using the financial crisis 2008- as an experiment

| | Model 1 (Full) | Model 2 (Restricted) |
|------------------------------|--------------------|-------------------------------------|
| FOF×Post-Crisis | 5.389** (2.653) | 5.819** (2.671) |
| Firm Controls | Yes | Yes (except the firm age variable) |
| Year effects | Yes | Yes |
| Firm Fixed Effects | Yes | Yes |
| Standard errors clustered by | Firm | Firm |
| Observations | 563 | 479 |

ESG Ratings before and during the financial crisis

