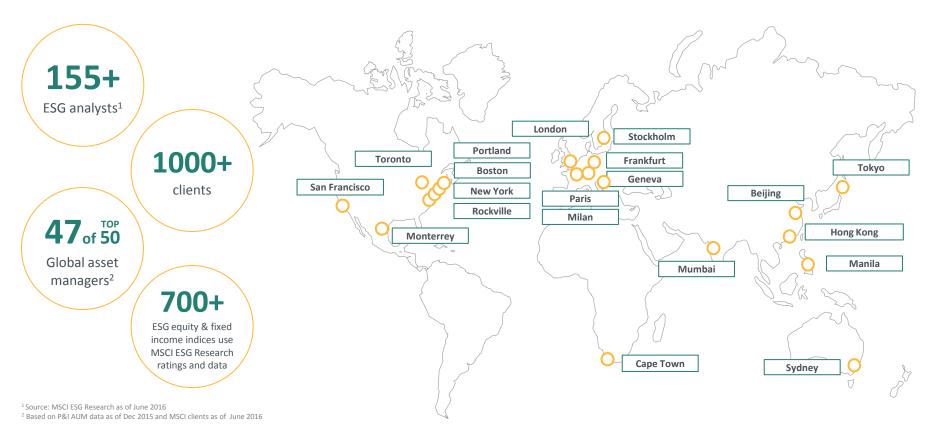


ESG IN FINANCIAL MARKETS: WHY SHOULD WE CARE?



INTRODUCING MSCI ESG RESEARCH







MSCI ESG RESEARCH AWARDED FIRST PLACE IN

13 OUT OF 17 CATEGORIES, INCLUDING:

Best firm for Socially Responsible Investing Research
Corporate Governance Research | Indexes | Data
Fixed Income Research | Emerging Markets Research









INTRODUCING THE **PRESENTATION**



Why ESG matters?

- What is driving investors' interest and how Asset Managers respond to that?
- ESG as a growth catalyst for asset managers to attract new mandates

How does ESG complement fundamental analysis?

- Governance: what are the advantages of an effective board oversight in capital markets?
- Brexit: identifying outliers combining Equity Research and ESG Analysis
- Regulatory scrutiny: how to predict fines?





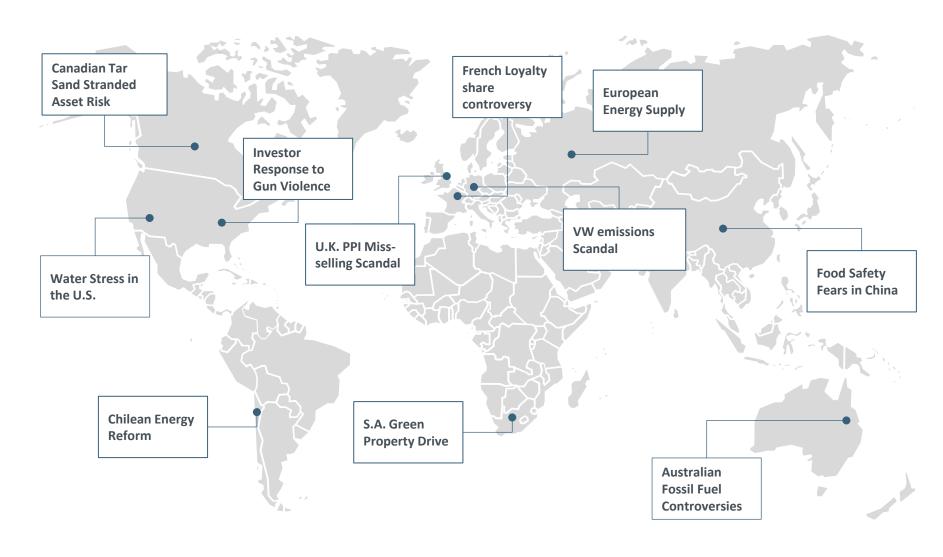
WHY ESG MATTERS?

Macro trends: Understand what is driving ESG integration and how Asset Managers respond to this growing demand



ESG RISKS – THE WORLD IS CHANGING



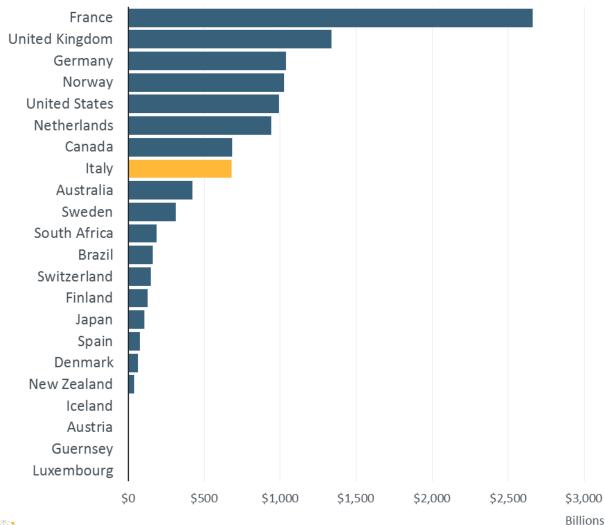




WHAT IS DRIVING INTEREST IN ESG



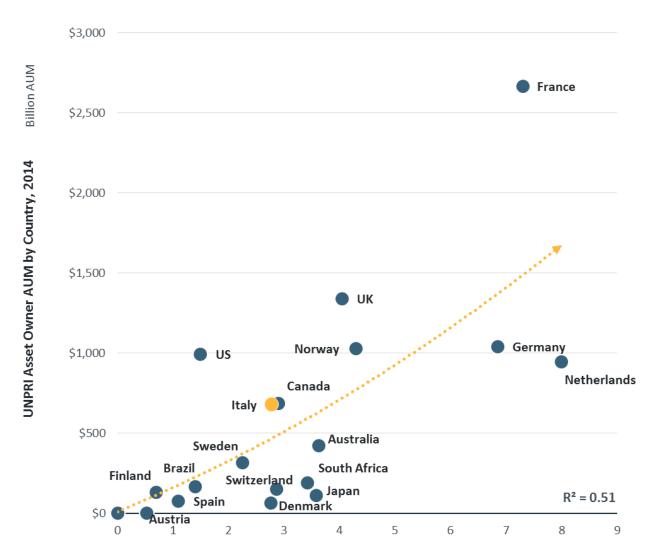
UNPRI Asset Owner Signatories AUM, 2014





HOW AM HAVE RESPONDED TO ESG DEMAND





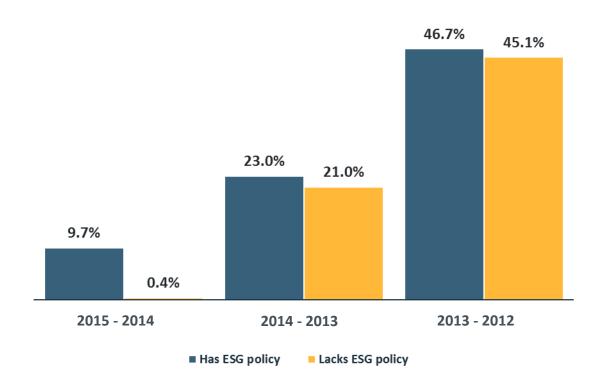
Ave Responsible Investment Management Scores by Country, 2014



ESG: A **GROWTH CATALYST** ACROSS AM?



Growth AUM 2015 - 2012: ESG strategy vs none





HOW AM HAVE RESPONDED TO ESG DEMAND



INTEGRATION



Incorporate ESG criteria to enhance long term return, manage ESG financial risk

VALUES & FINANCIAL RETURNS

Align portfolio with investor's ethical or political values



Generate measurable social or environmental benefits as well as financial returns





HOW DOES ESG COMPLEMENT FUNDAMENTAL ANALYSIS?

Case studies on how and where ESG can add value in the financial sector

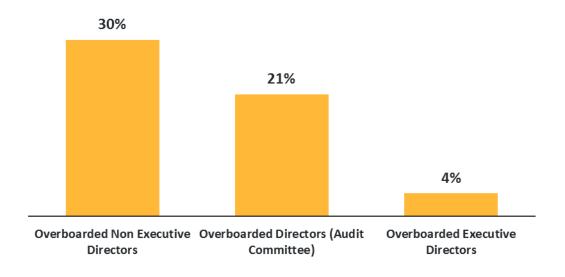




OVER-BOARDING

- Why: It represents a concern in terms of effective representation of shareholders' interest, questioning the time directors have to devote to their responsibilities.
- Action: We compared companies to country practices in the whole MSCI Governance Metrics Universe to find outliers.
- Results: One third of companies in this industry exhibited at least one over-boarded non-executive director, UBS,
 Daiwa and Nomura were outliers.

Over-boarding in Capital Markets, MSCI ACWI



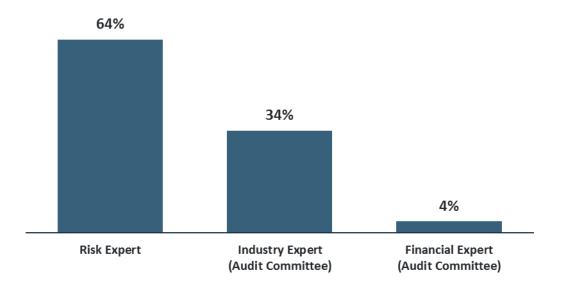




LACK OF KEY EXPERTISE ON BOARD

- Why: It may undermine directors' understanding of the business and their ability to satisfy shareholders' interests.
- Action: We compared companies to country practices in the whole MSCI Governance Metrics Universe to find outliers.
- **Results:** Two thirds of companies lacked of risk expertise in the industry. **Daiwa** and **Northern Trust** underperformed their industry and home market peer groups.

Lack of Key Expertise in Capital Markets, MSCI ACWI







INTEGRITY AND NEGATIVE VOTES

Negative votes against directors

- Why: To identify potential deviation from shareholders' interests.
- Results: In Capital Markets, 17% of the companies were flagged for having (at least) one director with more than 10% negative votes against from shareholders.

Companies	Directors with more than 10% votes against	Including Chairman	Votes against Chairman
Schroders	1	✓	16%
TD Ameritrade	1		
Blackrock	1		
Platinum Inv.	3	✓	48%
Partners Group	4		
IGM Financial	5	✓	13%
Investec	5		
Deutsche Bank	19		

Controversies and Bankruptcy

- Why: To identify potential risks to efficient management at the companies where they hold mandates.
- Results: In Capital Markets, 19% of companies were flagged for board integrity and only one company is flagged for executives' misconducts.

Companies	Board Integrity	Directors	Leadership	Misconduct
Blackrock	✓	2	CEO + Chair	
Invesco	✓	2		
Northern Trust	✓	2		
E*Trade Financial	✓	2		
Brookfield AM	✓	2		
Morgan Stanley	✓	1	Lead Director	
BNY	✓	1		
UBS Group	✓	1		
Raymond James	✓	1		
CITIC Securities				✓

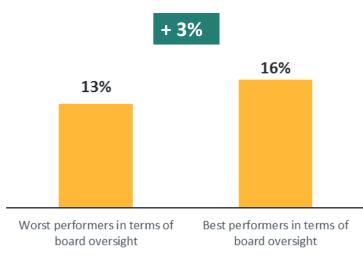




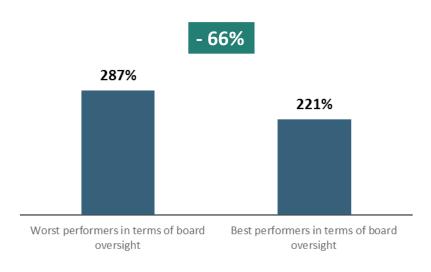
MEASURING THE IMPACT

Profitability in Capital Markets, 2011-2015

Financial Stability in Capital Markets, 2011-2015



Average Return on Equity in the last 5 years



■ Average Debt/Equity in the last 5 years



CASE STUDY 2: THE IMPACTS OF BREXIT



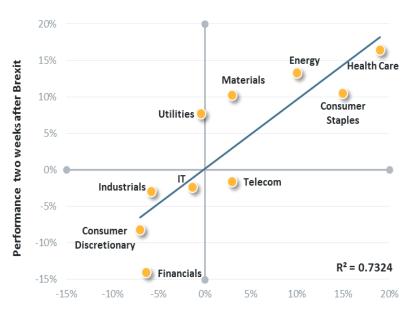
MSCI Equity Research published a study which explained UK sectors' performance after Brexit with the use of two metrics.

- Economic exposure: the geographic distribution of companies' revenue had a considerable impact on stock price, especially in events of shock, such as the Brexit.
- <u>Economic sensitivity</u>: Sensitivity to economic activity's variation explained nearly half of the performance of cyclical sectors relative to defensive sectors in the two weeks that followed Brexit.

GICS Sectors	UK Economic Exposure	Economic Sensitivity	Performance after Brexit
Health care	3.4%	-0.57	16.4%
Energy	11.4%	-0.24	13.3%
Consumer Staple	11.7%	-0.51	10.5%
Materials	4.3%	0.23	10.2%
Utilities	67.1%	-0.47	7.7%
Telecom	36.9%	-0.19	-1.6%
IT	17.6%	0.25	-2.4%
Industrials	29.0%	0.36	-3.0%
Consumer Discretionary	39.6%	0.27	-8.2%
Financials	48.8%	0.12	-14.1%

Source: MSCI ESG Research

UK economic exposure post-Brexit performance



Function of Economic Sensitivity & UK Exposure

Source: MSCI ESG Research

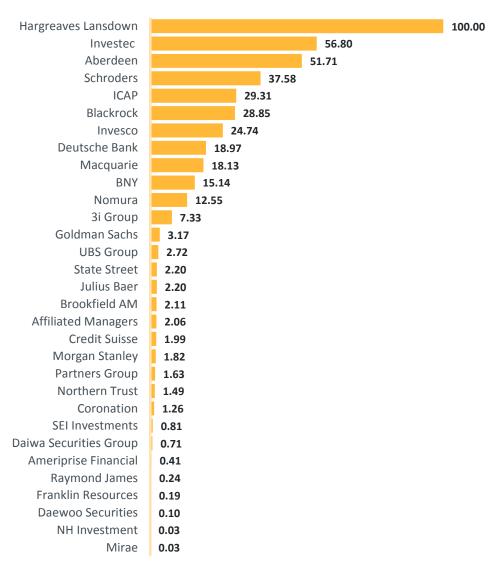
Results: Companies with higher UK economic exposure and positive economic sensitivity to share prices were the most exposed to the impacts of Brexit, which resulted in negative performance.



CASE STUDY 2: THE IMPACTS OF BREXIT



UK economic exposure within Capital Markets (%)



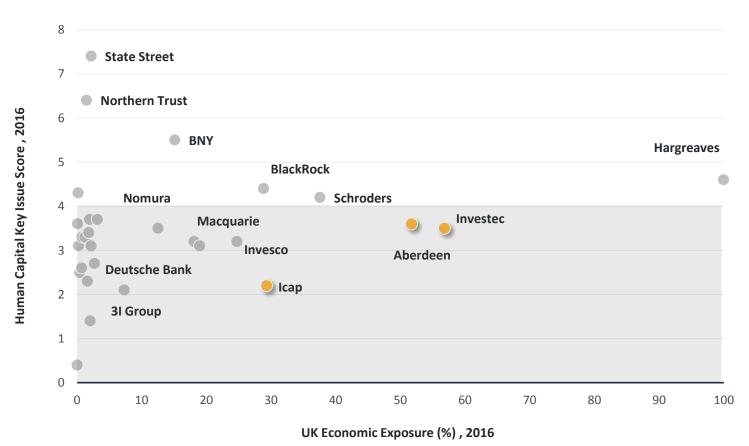


CASE STUDY 2: THE IMPACTS OF BREXIT



We mapped the UK economic exposure of each company in the Capital Markets industry with our internal Human Capital Management (HCM) scores. We selected the companies with higher exposure and the lower HCM scores as outliers to sudden turnover and *corporate change affecting employees*.

Human capital performance vs. economic exposure





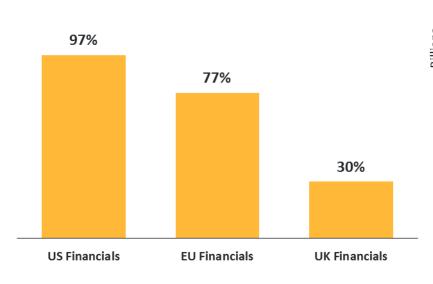
CASE STUDY 3: REGULATORY SCRUTINY

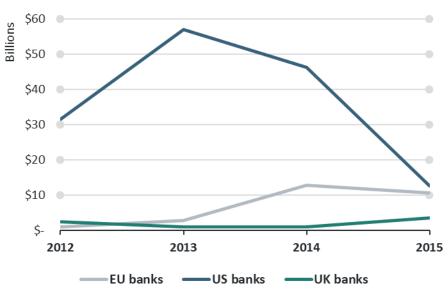


- US and EU banks are mainly targeted by US regulators, but UK banks are mainly regulated by UK authorities.
- US regulators have increased their focus outside US since 2012.

% of fines paid to US Regulators by Region, 2009-2015

Volumes of pay-outs paid to US regulators, 2012-2015



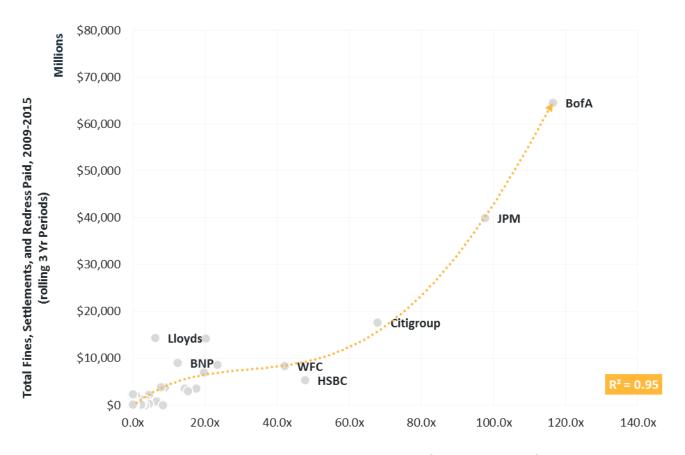




CASE STUDY 3: REGULATORY SCRUTINY



Regulator Visibility Ranking (RVR) is the result of the combination of our internal controversy data with company size (measured using rolling three year average equity). Using the RVR and historical pay-out data, we generated a regression formula to estimate future pay-outs for each company in our sample.



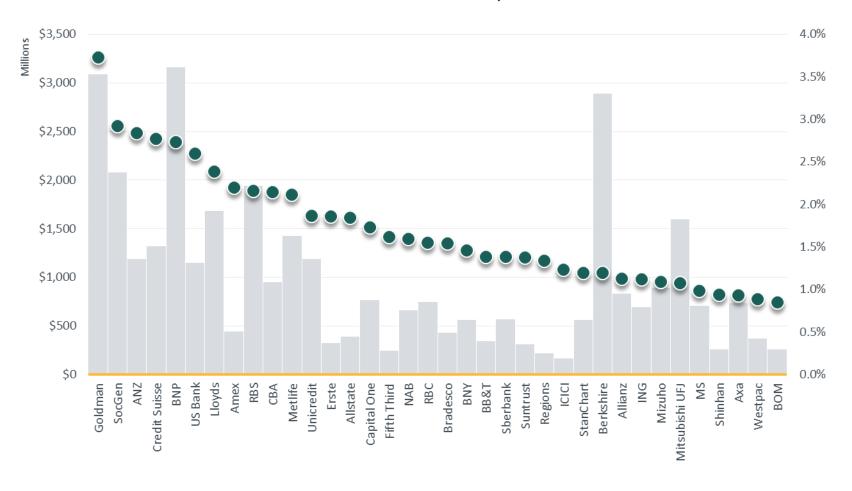
Regulator Visibility Ranking, 2009-2015 (rolling 3 Yr Periods)
(Higher numbers = more controversies and larger total equity value)



CASE STUDY 3: REGULATORY SCRUTINY



Fines estimates in the Financial Sector, 2016-2018



- Estimated Payouts: 2016 2018
- Estimated Payouts as % of Equity: 2016 2018



FINAL REMARKS



Why ESG matters?

• **ESG integration:** integrating ESG factors can be a differentiator for assets growth – asset managers with strong ESG strategies saw a higher AUM growth between 2014 and 2015 than those without notable ESG strategies.

How does ESG complement fundamental analysis?

- Governance: Companies with stronger board efficacy practices tended to manage investors'
 money more efficiently (higher ROE in the last five years) and had lower leverage ratios (in the last
 five years).
- Brexit: Combining ESG data to UK economic exposure, we were able to identify those companies at a potentially weak position for sudden turnover and corporate change affecting employees.
- Regulatory scrutiny: US regulators are increasing their focus on European institutions and we are
 able to estimate those future fines based on a metric that combines size and corporate behavior of
 financial institutions.



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