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SPOKE 4

D4.1.3 – Policy briefs and best practices for SME's access to sustainable finance instruments

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SFDR Market-Implied Sustainability Scores (SMIS): Implications for Sustainable Finance and Investment Strategies

Based on the paper *"Market-Implied Sustainability: Insights from Funds' Portfolio Holdings"*, by R. Giacometti, G. Torri, M. Bonomelli, D. Lauria. Preprint available at <https://arxiv.org/abs/2510.20434>

1. Background

The European Union has positioned itself at the forefront of sustainable finance, introducing regulatory frameworks such as the **Sustainable Finance Disclosure Regulation (SFDR)** to increase transparency and reduce the risk of greenwashing. In its current form, SFDR requires asset managers to classify funds as:

- **Article 9 ("dark green")** – funds with sustainability as their explicit objective,
- **Article 8 ("light green")** – funds that promote environmental or social characteristics, and
- **Article 6** – funds without sustainability focus.

Despite this progress, sustainable investing continues to face two main challenges:

1. Greenwashing risks, where sustainability claims do not align with actual practices.
2. Inconsistent ESG metrics, with rating agencies often providing divergent assessments of the same company.

This paper introduces the **SFDR Market-Implied Sustainability (SMIS)** scores, derived from actual portfolio allocations of Article 9 funds. SMIS scores are attributed to individual companies based on investment funds' holdings, assessing which stocks are over-represented in Article 9 funds compared to the rest of the funds in the market. Unlike ESG scores produced by rating agencies, SMIS reflects **investors revealed preferences** for sustainability, as expressed through capital allocation. The study compares SMIS with ESG scores issued by the data provider Refinitiv, analyzes their determinants, and evaluates their implications for financial performance. The output of the analysis may also be relevant for the ongoing process of revision of the SFDR framework.

2. Objectives of the Study

The research pursues three central objectives:

1. **Develop and Validate SMIS**

- Construct a market-implied sustainability measure based on fund allocations.
- Identify the corporate and sustainability-related variables that influence SMIS.

2. Measure Alignment Between Market Behavior of Sustainable Funds and ESG

- To what extent do high ESG-rated firms appear in Article 9 funds?

3. Assess Financial Performance Implications

- Test whether SMIS provides useful signals for improving portfolio risk-adjusted returns, compared with traditional ESG scores.

3. Computation of SMIS scores

Our approach identifies which assets are **over- or under-invested** in the most sustainable funds—those classified as SFDR Article 9 (“dark green”)—compared with other funds in the market (Articles 6 and 8). For each quarter, we divide the universe of investment funds into two groups:

- **SFDR 9 funds**, which explicitly target sustainable investments;
- **SFDR 6 and 8 funds**, which have limited or no sustainability objectives.

Then, for each asset i , we compute the share of funds in each group holding that asset in their portfolio and take the difference between the two shares. This gives the **SMIS score**:

$$\text{SMIS}_i = p_{9,i} - p_{O,i}$$

where:

- $p_{9,i}$ is the percentage of SFDR 9 funds holding asset i ;
- $p_{O,i}$ is the percentage of other funds (SFDR 6 and 8) holding asset i .

Assuming long-only portfolios, the indicator ranges between -1 and $+1$.

- **Positive values** indicate assets over-represented in SFDR 9 portfolios (i.e., implicitly more aligned with sustainability preferences).
- **Negative values** indicate assets under-represented in SFDR 9 portfolios (i.e., less aligned).

Finally, to assess whether differences are statistically meaningful, we test whether the SMIS differs significantly from zero using a standard two-sample proportion test.

4. Key Findings

The empirical analysis covers a panel of approximately 500 equity funds and ETFs with geographical focus on Europe, each labelled with an SFDR class. Data covers the period 2002-2023, and for each quarter the portfolio composition of each fund is available from Lipper. For each asset in the portfolios the annual ESG score provided Refinitiv Eikon and the market value of the stock is also available. The SMIS score is computed for each of the stocks in the funds.

4.1 SMIS vs. ESG Misalignment

- ESG scores and SMIS diverge substantially. High ESG ratings do not guarantee strong representation in Article 9 funds. No relevant linear relationship is observed between ESG and SMIS. Instead, dispersion of SMIS grows proportionally to the ESG score.
- This implies that some highly rated ESG firms are excluded from dark green funds—possibly due to perceived greenwashing risks, or due to a misalignment of the criteria used by fund managers and ESG rating agency.
- Conversely, some firms with low ESG scores achieve high SMIS, indicating that market actors may recognize sustainability dimensions overlooked by rating agencies, or that managers of SFDR 9 funds disregard some of metrics used by agencies to measure sustainability.

4.2 Drivers of SMIS Inclusion

Analysis reveals that Article 9 funds prioritize:

- **Green revenues:** A consistently strong positive driver of SMIS.
- **Lower emissions:** Firms with lower standardized total emissions are more likely to be included.
- **Emissions reduction targets:** Firms with clear targets are favored by sustainable funds.
- **Fewer ESG controversies:** Strong predictor of positive SMIS.
- **Board diversity:** Positively valued across quantiles.

Conversely, companies engaged in armaments production and, unexpectedly, those who adopted formal human rights policies are negatively associated with SMIS. This may reflect skepticism about the effectiveness of such policies or exposure to high-risk sectors.

4.3 Portfolio Performance

- **SMIS-based strategies outperform ESG-based ones.** Portfolios tilted toward high SMIS firms consistently generate higher returns and lower risks.
- Strategies that rely only on **high ESG firms underperform** benchmarks, suggesting ESG scores alone are poor predictors of financial resilience.
- **“Bottom ESG–Top SMIS” firms deliver especially strong outperformance**, showing that firms recognized by Article 9 funds but not by ESG ratings provide unique investment opportunities.

5. Policy Implications

The proposed analysis may have several implications, especially since the SFDR framework is currently under a revision process.¹

5.1 Improving SFDR Effectiveness

The misalignment between ESG scores and fund allocation highlights a critical issue: **disclosure labels alone are insufficient** to capture sustainability. SMIS demonstrates that investors' actual allocation decisions reveal additional insights, which could help regulators refine classification and oversight.

¹ After a round of consultation, a proposal revising the SFDR is planned for the fourth quarter of 2025 (https://finance.ec.europa.eu/sustainable-finance/disclosures/sustainability-related-disclosure-financial-services-sector_en#legislation)

5.2 Investor Protection

Retail and institutional investors risk being misled if they rely exclusively on ESG ratings. Market-implied measures provide a complementary perspective, showing where sustainable funds genuinely allocate capital.

5.3 Enhancing EU Taxonomy Alignment

SMIS naturally emphasizes companies with credible emissions reductions, green revenues, and diversity initiatives, aligning with the EU's transition finance agenda. Policymakers could leverage these market-based signals to strengthen consistency between EU Taxonomy goals and investment practices.

5.4 Addressing Greenwashing

Discrepancies between ESG scores and SMIS may highlight potential greenwashing practices—whether by companies inflating ESG indicators or by funds misclassifying strategies. Integrating SMIS into supervisory processes could improve detection and enforcement.

6. Policy Recommendations

1. Integrate Market-Implied Indicators

- The European Commission and ESMA should explore incorporating SMIS-like measures into monitoring frameworks, alongside traditional ESG disclosures.

2. Enhance Transparency in ESG Ratings

- Require ESG providers to disclose methodologies, weighting schemes, and sector adjustments more clearly, enabling better comparability and alignment with SFDR classifications.

3. Support Transition-Oriented Firms

- Incentivize investment in companies with credible green revenues and emissions reduction targets, reflecting factors consistently valued by sustainable funds.

4. Strengthen Anti-Greenwashing Oversight

- Use discrepancies between ESG and SMIS as early-warning indicators for potential greenwashing in both corporate disclosures and fund marketing.

5. Promote Investor Education

- Develop EU-level guidelines encouraging investors to use both ESG scores and market-implied measures to evaluate sustainability, reducing overreliance on any single metric.

7. Broader Significance

The findings have implications beyond Europe. As global investors grapple with the credibility of ESG metrics, **market-implied approaches** offer a new path to triangulate sustainability. By leveraging fund allocation data, regulators and investors can:

- Gain a **dynamic, real-time perspective** of sustainability trends in capital markets.
- **Improve risk management**, especially by identifying firms vulnerable to ESG controversies.

- **Enhance the credibility** of the sustainable finance ecosystem, ensuring capital is channeled toward genuine contributors to the transition.
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8. Conclusion

This study demonstrates that **Market-Implied Sustainability Scores (SMIS)** provide a powerful complement to ESG ratings. While ESG ratings capture policy and disclosure practices, SMIS reflects **investor judgment in practice**. The divergence between the two offers both opportunities (for detecting greenwashing and improving strategies) and challenges (for regulatory harmonization).

For policymakers, the key takeaway is clear: sustainable finance frameworks must combine **disclosure-based measures (ESG, SFDR labels)** with **market-based indicators (SMIS)** to ensure credibility, effectiveness, and resilience. By doing so, the EU can strengthen its leadership in sustainable finance and safeguard investors from misleading signals.

Annex: Key Terms

- **SFDR (Sustainable Finance Disclosure Regulation)**: EU framework requiring funds to classify their sustainability commitments (Article 6, 8, 9).
 - **ESG (Environmental, Social, Governance) Scores**: Ratings from specialized agencies measuring firms' sustainability policies and disclosures.
 - **SMIS (SFDR Market-Implied Sustainability) Scores**: A novel indicator based on the relative presence of companies in Article 9 ("dark green") funds compared with other funds.
 - **Greenwashing**: Misleading claims about sustainability, either by companies or funds, that exaggerate environmental or social responsibility.
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