Note: The following is a redacted version of the original report published October 18, 2022 [25 pgs].

GS SUSTAIN

SFDR updates - latest flows, guidance, views, and a framework for Sustainable Investments

The Sustainable Finance Disclosure Regulation (SFDR) continues to drive the transition towards ESG integration amongst the investment community in Europe and beyond, with ESG funds (Article 8 and 9) capturing growing share of fund flow. Equity Article 8 and 9 funds have received nearly 4x the cumulative inflows vs. non-ESG counterparts (Article 6) since 2019. These flow dynamics have implications for company and sector representation in Art. 8 and 9 funds - we apply our fund holdings analysis to capture the most relatively overweight and widely owned companies in Art. 8 and 9 serving as a signal for crowding. Equally, SFDR continues to capture growing investor attention given its interpretation challenges. Intended to be a disclosure and transparency regulation, we believe SFDR has become overinterpreted by asset managers and adopted as a label, presenting practical application challenges that risk unintended consequences for the real economy. We explore some key questions surrounding SFDR, assess recent guidance and share our views on interpretation. Having become one of the most debated topics, we also present a framework for qualifying 'Sustainable Investments'.

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Executive Summary

SFDR continues to drive flows and the transition of non-ESG funds towards ESG (Article 8 and 9) funds as managers find it increasingly difficult to market Article 6 (non-ESG) funds in Europe. Over $900bn in AUM has been 'upgraded' from Article 6 to 8 or 9 since Jan '22 to Aug '22 (Exhibit 3). Effectively all funds in Europe are facing pressure to transition to Article 8 at a minimum, especially as 100% of equity fund inflows over previous quarters has gone into ESG funds.

Fund flows continue to trend favourably for ESG funds (Article 8 and 9) as a whole, as Article 6 funds see outflows. Equity ESG funds have received nearly 4x the cumulative inflows vs. non-ESG counterparts since 2019, with Article 8 and 9 funds receiving ~US$579bn between Jan '19 and Aug '22 (latest avail.) compared to Article 6 ('not stated') receiving ~US$148bn during the same period. YTD (Aug '22) Article 9 funds received $23.9bn in inflows vs. -$23.2bn in outflows for Article 8 and -$2.6bn in outflows for Article 6 (Exhibit 1).

Equity Article 9 funds continue to take significant share of flows, capturing an average of $294mn in flows since Jan '19 vs. only $138mn for Article 8 and $89mn for Article 6. YTD Article 9 funds have received an average of $30.9mn in inflows vs. outflows of -$5.3mn and -$0.5mn for Article 8 and 6 funds, respectively.

Contrary to headlines highlighting trends in downgrades of funds from Article 9 to 8, we see more upgrades from Article 8 to 9 funds vs. our prior assessment. Since our first refresh (Jan '22), we have witnessed 69 funds ($36.9bn in AUM) being upgraded from Article 8 to 9 across equity and fixed income, while 42 funds ($31.2bn) were 'downgraded' from Article 9 to 8 (Exhibit 3).

Improver / transition funds emerging as differentiated strategies amidst the crest of Article 8 / 9 penetration. We see new improver / transition funds or dedicated allocations within existing ESG strategies as a sign of differentiation amongst ESG strategies and a critical element to align portfolio ESG objectives with real economy environmental and social outcomes (Exhibit 5).

Aerospace & Defense and Oil & Gas sectors saw some of the largest increases in ownership by Article 8 funds, amongst sectors most underweight. Relative weights for Oil & Gas increased in Article 8 funds from -70% (March '22) to -46% (Sept '22). A&D shifted from -79% to -65% underweight (Sep '22).

Given nearly all assets are moving towards Article 8 and 9 funds in Europe, we see an overly strict interpretation of SFDR risks exacerbating a 'Divestment Dilemma' — We share our latest views and interpretations of SFDR and establish a framework for 'Sustainable Investments'. We highlight lessons learned and answer key questions associated with SFDR, sharing views from the road and industry conversations and provide takeaways of ESMA's latest guidance documents. We establish a framework for asset managers to qualify 'Sustainable Investments' (Exhibit 6) and DNSH (Do No Significant Harm) (Exhibit 7) and respond to recent critical questions sent to the EU Commission on defining 'Sustainable Investments'.

SFDR continues to drive ESG flows

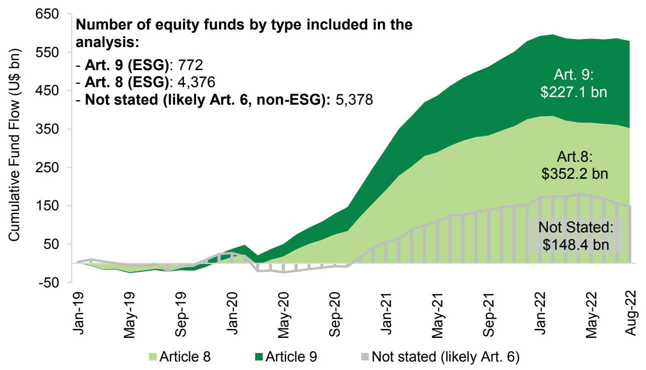
SFDR continues to drive flows and the transition of non-ESG funds towards ESG (Article 8 and 9) funds as managers find it increasingly difficult to market Article 6 (non-ESG) funds in Europe. All funds in Europe are facing pressure to transition to Article 8 at a minimum, especially as 100% of equity fund inflows over previous quarters has gone into ESG funds. Article 9 equity funds had consistent inflows in the past two years, while Article 8 funds saw some outflows in the recent months amid market turbulence, albeit to a lesser degree vs. Article 6 outflows. Additionally, with the **MiFID II sustainability suitability criteria having come into effect in August, we see the demand and pressure for ESG funds to further strengthen, as fund distribution platforms quickly ramp up their ESG offerings to meet end-clients' 'sustainability preferences', effectively requiring Article 8 or 9 level reporting.** *For further information on MiFID II please read EU ESG Regulation Updates (Q3 '21): EU Taxonomy, SFDR, and MiFID II Sustainability Preferences.*

Flows into Article 8 & 9 funds have significantly outpaced Article 6 (or 'non stated'), with cumulative flows into ESG equity funds in the past two years standing at almost 4x compared to non-ESG counterparts. On the equity side, cumulative flows into Article 8 & 9 funds reached ~US$579bn between Jan '19 and Aug '22 (latest avail.), while 'Not Stated' counterparts (likely Article 6) saw inflows of only ~US$148bn during the same period. On the fixed income side, cumulative flows into Article 8 & 9 funds reached ~US$403bn, above the likely Article 6 funds' ~US$336bn during the same period. This was despite the number of Article 6 funds being still higher than ESG funds, at 5,378 vs. 4,376 for Article 8 and 772 for Article 9 on the equity funds side, and 3,790 Article 6 vs. 2,550 Article 8 and 262 Article 9 fixed income funds.

Article 9 funds have shown significantly stronger flows versus Article 8 and 6 funds, and have remained consistently positive despite recent market turbulence. Average cumulative flows going into each Article 9 fund from Jan '19 to Aug '22 were significantly higher than Article 8 and Article 6**.** On the equity side, since Jan'19, Article 9 funds saw average cumulative inflow per fund of US$294 mn vs. US$80 mn for Article 8 and US$28 mn for Article 6. Similarly, on the fixed income side, Article 9 funds saw an average cumulative inflow per fund of US$195 mn vs. US$138 mn for Article 8 and US$89 mn for Article 6.

Exhibit 1: Cumulative fund flow of Article 8 & 9 Equity funds have outgrown non-ESG counterparts by almost 4x

Cumulative fund flow of European Equity funds by type (U$bn), Jan 2019 - Aug 2022

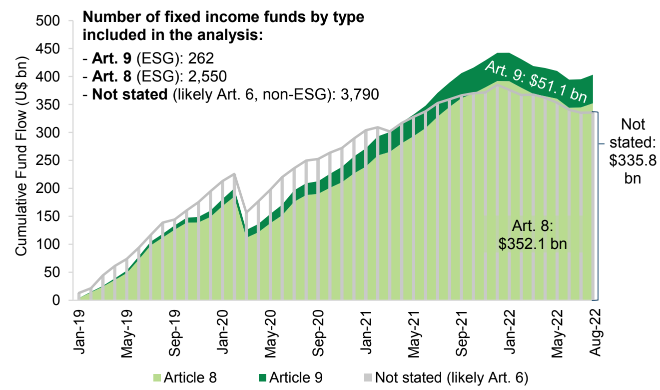


Data is for active funds only

Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 2: Cumulative fund flow of Article 8 & 9 Fixed Income funds have also surpassed non-ESG peers

Cumulative fund flow of European Fixed Income funds by type (U$bn), Jan 2019 - Aug 2022



Data is for active funds only

Source: Morningstar, Goldman Sachs Global Investment Research

In our view, this dynamic has sent a clear market signal for asset managers to launch and/or relabel funds as ESG (Article 8 & 9) to capture flows. Since the start of 2022, >1,600 Article 6 funds representing US$926bn in AUM have been upgraded to Article 8 or 9. Looking at Equity and Fixed Income funds specifically, 1,155 Article 6 funds (US$593 bn in AUM) have been upgraded to Article 8, with another 54 (US$13bn in AUM) upgraded to Article 9. **This trend in relabeling funds is corroborated by our industry conversations, where clients have difficulty selling Article 6 funds with some stating end-clients have asked for redemptions on Article 6 funds.**

Changes have been made within Article 8 and 9 funds as well. Within the first eight months of 2022, 35 Article 9 funds representing US$27bn have been downgraded to Article 8 funds across equity and fixed income categories. **However, upgrades from Article 8 to 9 appear more prevalent than downgrades,** with 66 Article 8 equity and fixed income funds representing US$37bn being upgraded to Article 9 funds during the same period. In our view, this wave of reclassification within ESG funds is mainly due to the market's uncertainly around the definition of 'sustainable investment', something we explore further in the next section.

Exhibit 3: US$926bn in AUM has been upgraded from Article 6 to Article 8/9 since the beginning of the year
Overview of recategorizing within Article 6, 8 and 9 funds, Jan - Aug 2022

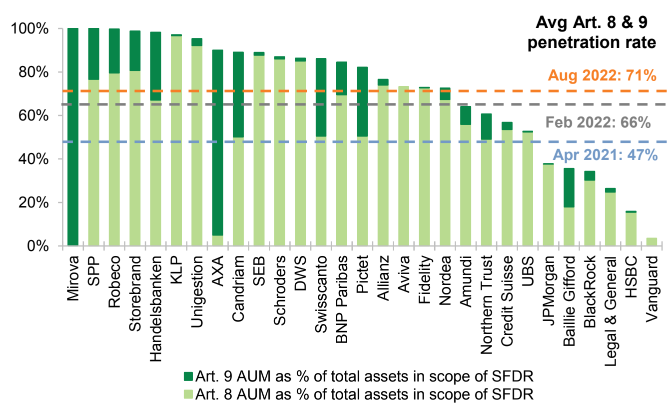
	Upgrades			Downgrades	
	Art. 6 → Art. 8	Art. 6 → Art. 9	Art. 8 → Art. 9	Art. 9 → Art. 8	Art. 8 → Art. 6
Total Number of Funds	**1563**	**63**	**69**	**42**	**38**
Equity	678	41	46	22	18
Fixed Income	477	13	20	13	12
Others	408	9	3	7	8
AUM ($bn)	**904.3**	**21.3**	**36.9**	**31.2**	**10.8**
Equity	367.4	10.0	33.6	12.8	5.4
Fixed Income	225.6	2.9	3.0	14.2	2.5
Others	311.3	8.3	0.3	4.2	2.9

We found no Article 9 to Article 6 downgrades in our analysis

Source: Morningstar, Goldman Sachs Global Investment Research

SFDR is leading to further penetration of ESG across all asset managers, with some already at 100%. Taking a sample of nearly 30 asset managers, we find a wide range in how much of the total fund assets in scope of SFDR asset managers are classifying as article 8 and 9, from a low of 3% to a high of 100%. Across 30 select large asset managers, **penetration of Article 8 and 9 funds has risen from 47% to 71% over a span of 16 months** (Exhibit 4)**.** Looking within ESG funds of the selected pool, Article 8 makes up the vast majority of ESG funds (avg. 81%) while Article 9 funds remain rare (19%). *We recognize that not all asset managers have made final decisions on SFDR fund classifications, so results are likely to change as firms release additional information, particularly where initial percentages may be low.*

Exhibit 4: Penetration of Article 8 and 9 funds amongst select managers rose to 71% v. 47% when SFDR kicked in last year
Article 8 and 9 Fund Assets as a percentage of total assets in scope of SFDR for select asset managers



Source: Morningstar, Goldman Sachs Global Investment Research

Transition / Improver funds are become an emerging category

We see transition / improver strategy emerging as a growing impact category for ESG funds in Europe, as Article 8 & 9 penetration approaches critical mass and asset managers seek greater differentiation in ESG fund strategies. Recognition and appreciation for transition strategies has been growing among investors as they are measurable, additional, and connected with tangible outcomes in the real economy. While still small, in the first eight months of 2022, Article 8 equity transition funds increased from 13 to 19 (US$9.4bn in AUM), corresponding to an over 50% growth in AUM in the transition category; Article 9 equity transition funds increased from 23 to 29, reaching US$6.2bn AUM in August (Exhibit 5).

We note that Taxonomy can serve as a powerful tool to identify companies in transition, and to credentialize companies' transition efforts. Companies with initial low levels of revenue eligibility, yet high levels of CapEx alignment to the Taxonomy could be sending a critical forward-looking signal in their transition strategy. For example, in our recent report First review of corporate Taxonomy reporting, we highlighted that RWE registers only 18% of its turnover as Taxonomy-eligible, but >90% of its €50bn in investment (CapEx) out to 2030 is targeted to be aligned, going into renewables. We envisage the Taxonomy to help spur the issuance of green debt, particularly amongst transitioning companies.

Exhibit 5: While still small, Article 8 transition and improver funds have seen over 50% growth in AuM
Overview of Article 8 and 9 Transition and Improver funds, Jan 2022 vs. Aug 2022

	Equity		Fixed Income	
	Jan '22	Aug '22	Jan '22	Aug '22
Number of Art. 8 Transition funds	13	**19**	4	**5**
Total AuM of Art. 8 Transition funds (U$ bn)	*6.1*	***9.4***	*0.9*	***1.3***
Number of Art. 8 Improver funds	5	**13**	0	**0**
Total AuM of Art. 8 Improver funds (U$ bn)	*0.3*	***1.0***	-	**-**
Number of Art. 9 Transition funds	23	**29**	2	**5**
Total AuM of Art. 9 Transition funds (U$ bn)	*5.8*	***6.2***	*0.07*	***0.19***

Transition funds include those with "Transition","Paris-aligned" and "Decarbonisation" in fund names; Improver funds include those with "Improver" and "Momentum" in fund names

Source: Morningstar, Goldman Sachs Global Investment Research

Dissecting SFDR - New guidance and latest views on SI, PAI, DNSH, and introducing a framework for 'Sustainable Investments'

New SFDR implementation documents from ESMA give improved clarity into the application of SFDR for asset managers' product level disclosures, including use of principal adverse impact indicators at an entity-level for asset managers (PAIs) and new guidance that verifies investors can take a forward-looking view on critical components for Article 8 and 9 funds, providing flexibility in allowing for momentum / improver Article 9 strategies, in our view. We share our latest views from the road and industry conversations around how asset managers are incorporating SFDR and provide takeaways of ESMA's latest guidance documents. Proving difficult to interpret, we introduce a framework for qualifying 'Sustainable Investments' (Exhibit 6).

Our views on SFDR should not be taken as a substitute for legal counsel. Please consult legal counsel and your local regulator.

Key questions answered, highlights and latest views on SFDR

SFDR clarity is improving as the ESA's (ESMA, EBA, EIOPA) released a batch of guidance & clarification documents on product-level SFDR requirements (PAIs & DNSH) and EU Taxonomy reporting. We summarize the key points of those documents at the bottom of this note.

Key SFDR questions, highlights and our latest views on implications for asset managers ESG / sustainable strategies, based on our industry conversations:

What is the intention of SFDR?

- **SFDR is a disclosure and transparency regulation helping to frame the ambition of various ESG strategies, and is not a fund labeling scheme.** The EU Commission has stated that SFDR is not a label, while ESMA has again reiterated in recent guidance that Article 8 and 9 funds disclosures should not give the impression of a 'label' to investors. Our conversations suggest that ESMA will maintain a 'strategy neutral' approach to Article 8/9 categorizations and may be less prescriptive than previously thought in order to maintain SFDR's status and intention as a 'disclosure and transparency' regulation and not a 'label'. Recent clarification documents emphasize the flexibility in SFDR that allows the financial market participants to determine how they 'promote E&S characteristics' in the case of Article 8 strategies or define a 'sustainable investment' in the case of Article 9 strategies. However, this flexibility could change if the quality of product-level disclosures in SFDR templates from Jan 1st, 2023 is deemed insufficient. ESMA has been mandated to deliver more guidance on use of principal adverse impact indicators (PAIs), and propose amendments to funds with decarbonisation targets and consider products making taxonomy-aligned investments.
- **As a result of the flexibility, we believe more is more when it comes to SFDR product-level disclosures.** We see more detailed disclosures by asset managers in

their fund-level disclosures providing two key benefits: **1) Reduce threat of regulatory and investor scrutiny** - ESMA guidance (section 3.1) makes it clear that local regulators should ensure sufficient detail has been provided in fund prospectuses and potentially test fund holdings to ensure they meet stated objectives. **2) Maintaining long-term regulatory flexibility** - ESMA and the EC may potentially tighten SFDR disclosure requirements for funds if insufficient disclosures are made in pre-contractual and periodic reporting templates, according to our industry conversations.

How should investors interpret Article 2 (17) and defining a 'sustainable investment'? How should the % of SI be captured?

- **'Sustainable investments' in Article 9 funds can be defined on the basis of a fund's strategy, ambition/intention, and execution, allowing for flexibility that does not initially preclude Article 9 funds from owning anything, in our view.** We believe this more flexible view fits with SFDR's intention of Article 8/9 funds not becoming a 'label', and allowing for differentiation in investment strategies to drive positive environmental and social real economy outcomes. See below our suggested framework for qualifying 'sustainable investments' (Exhibit 6).
- **In our view, the pass / fail method for qualifying the percentage of SI is the only method that is compatible with the definition of 'sustainable investments' as defined in Article 2 (17).** Meaning companies that meet the FMPs designated criteria can be qualified as 100% SI. For example, if a company meets a threshold of >20% revenue aligned to the Taxonomy, then 100% of it can be captured as SI. Similarly, companies identified as decarbonisation leaders would qualify as 100% SI if meeting the FMPs thresholds. Attempts to use vague or weak / low thresholds could be criticised by clients as potentially not credible for SI, which may lead to market adoption of stricter thresholds naturally over time, helping to reduce greenwashing, a key objective of SFDR. For more information on our views here, please read our response to the latest ESA's questions to the EU Commission at the bottom of this note.
- **Proportional views of capturing SI are incompatible with strategies that utilise operational metrics for qualifying SI (e.g. decarbonistion leaders).** For more details, please read our response to the latest ESA's questions to the EU Commission at the bottom of this note.
- **The European Supervisory Authorities (ESAs) have sent a list of questions to the European Commission seeking greater clarification on key points of defining Sustainable Investments.** We share some more detailed views in the sections below.

How should the DNSH criteria for 'sustainable investments' be applied? And how should Principal Adverse Impact indicators (PAIs) be used?

- **DNSH application is up to the asset manager, while calculation of PAIs should be made on a best effort basis.** As laid out in Articles 6 to 9 of the SFDR RTS, FMPs shall include details of the 'best efforts' used to obtain information either directly from companies, or by carrying out additional research, utilising third party data providers, external experts, **or 'make reasonable assumptions'**. On this basis, we believe that FMPs can make reasonable assumptions on use of PAIs based on the level of materiality for given companies and apply engagement policies where PAIs are material but not reported by companies to ensure improvement and reduction of harm over time.

European Supervisory Authorities:

- European Banking Authorities (EBA)

- European Insurance and Occupational Pension Authority (EIOPA)

- European Securities and Markets Authority (ESMA)

- **We believe investors can take a forward looking view on DNSH assessments, which could allow for ESG momentum / improver / transition and engagement strategies to be qualified as Article 9 funds.** In the latest round of guidance, the European Supervisory Authorities' (ESAs) stated that 'improvement over time in principal adverse impact indicators (PAIs) can be used to satisfy the use of sustainability indicators to demonstrate a fund's overall 'sustainable impact', while highlighting that the 14 mandatory PAIs must be used for DNSH tests for defining 'sustainable investments' (for further details read document summaries below). In our view, this supports investors taking a forward-looking view on critical components to both Article 8 and 9 definitions as well as the DNSH provisions, supporting transition / improver strategies for either Article 8 or 9 funds. Additionally, Articles 6-9 of the SFDR RTS state that when addressing principal adverse impact FMPs should include a description of 'actions planned or targets set for subsequent periods…to avoid or reduce the principal adverse impact identified'. Therefore, using an extreme example, we believe a fund with a transitional sustainable investment objective could technically own (and encourage) a coal-fired power generation plant that is decarbonising in alignment with a net-zero scenario, considering it a 'sustainable investment' for Article 9 funds on the basis of its improvement in the PAIs and reduction of significant harm from carbon emissions over time. ***On this basis, the ability for investors to engage, incentivize and reward companies for making significant improvements on underlying sustainability factors is critical to delivering real-world environmental and social benefits, in our view.***

What are the potential internal and external (market) risks for applying a strict versus flexible approach to SFDR concepts?

- **While flexible, asset managers should view SFDR through two lenses -a 'regulatory' lens and a 'marketing lens', with the latter being more influential for what does or does not get owned in Article 8 or 9 funds,** asset managers should keep in mind that what may technically be allowed within the regulation may be fundamentally different from what end-clients would expect when assessing Article 8 and 9 products, in our view. In the case of PAIs, which serve as a sort of 'nutrition label' on Article 8 and 9 funds allowing for investors to own any investment they see fit, end-clients may look to the PAIs and question the underlying strategies where PAIs appear higher than the benchmark or prefer more prescriptive views when selecting Article 8 / 9 products (eg. low carbon footprints than the benchmark, or no exposure to fossil fuel companies, Taxonomy alignment, etc). Additionally, fund distribution platforms may use a fund's European ESG Template (EET) and underlying disclosures to match funds with clients' sustainability preferences in a simple manner.

- **Future minimum standards for SFDR are likely to be more process-focused**

rather than rules-based, according to our industry conversations. This implies it is unlikely at an EU level that any minimum standards will require any sort of prescriptive exclusions or adherence to PAI thresholds for underlying investments. As stated previously, **we believe any overly prescriptive minimum standards or exclusion requirements could threaten ESG fund innovation and lead to a 'divestment dilemma' that restricts capital from companies that need to transition the most -** *See* ***The Divestment Dilemma: Exclude or Engage.*** Instead, the promoted transparency of SFDR is intended to help to lead to market-self policing allowing clients to decide on the credibility of Article 8 and 9 funds while still allowing for innovative strategies to evolve...

- **...however, the current lack of regulatory clarity, has led many asset managers to adopt reserved ESG strategies initially, which put unnecessary investment constraints on Article 8/9 portfolios**. In our view, fragmented SFDR interpretation, and conflicting guidance from legal experts and national regulators has led to self-imposed interpretations of SFDR that limits many asset managers ability to execute on ESG strategies effectively - in some cases limiting portfolio managers' ability to allocate capital towards real economy environmental/social benefits or incentivize change in businesses with ESG challenges.
- ...**this confusion dynamic in the short term will have potential implications for capital flows, likely out of sectors deemed to be 'controversial',** while in the long term greater differentiation in strategies provides opportunities for ESG improvers and more forward-looking ESG strategies.

Once SFDR is operational what will change, if anything, in the way ESG is applied today?

- **SFDR will likely drive greater differentiation amongst the active management community towards development of proprietary ESG views, stewardship practices, and any ESG integration and ranking methodologies, in our view.** Due to the increased transparency required by SFDR, we increasingly see asset managers developing custom approaches to ESG integration with less reliance on headline ESG ratings or interpreted ESG data. We see firms opting for development of custom/in-house ESG ratings based on raw data, alignment frameworks to the SDGs or the EU Taxonomy, and launching more bespoke engagement/ improver strategies.
- **The EU Taxonomy serves as a regulatory and standardised definition of 'green' that many asset managers may find regulatory support in and increasingly use as basis for qualifying 'sustainable investments'**. We increasingly see investors: 1) having to adopt Taxonomy data sets for regulatory reporting, and 2) also using the Taxonomy as a framework for qualifying 'sustainable investments', with some asset managers launching dedicated 'Taxonomy-aligned' funds. We believe Taxonomy alignment will increasingly be used to credentialise a fund as 'green' with higher aligned funds potentially seeing greater flows, especially under new MiFID II sustainability preferences. While company Taxonomy disclosure is still nascent, investors can utilise comparable equivalent information from third-party providers to

help satisfy Taxonomy reporting. We envisage market adoption of the EU Taxonomy will take place gradually over the coming years as the market digests the EU Taxonomy and company disclosures and data sets mature. *We note that the DNSH provisions of SFDR apply separately from the DNSH provisions of the Taxonomy, meaning any company deemed to be Taxonomy aligned (and meeting DNSH of Taxonomy) must also satisfy the investor-defined DNSH provisions for SFDR.*

A framework for 'Sustainable Investments'

Defining 'Sustainable Investments' (SI) has become one of the most debated topics around SFDR's interpretation. From our industry conversations the definition of 'sustainable investments' per Article 2 (17) was left intentionally vague allowing asset managers the flexibility to define their own approach while requiring clear criteria and basis for their designations to provide enhanced comparability to end-investors.

We see three types of strategies that can be applied for defining SI that brings both enough structure to allow asset managers to apply this across their operations, and flexibility to accommodate innovative approaches to achieving sustainable investment objectives as intended by the regulation.

1. Leaders Strategies - Companies established as leaders by the FMPs self-defined criteria. For example, EU Taxonomy alignment, SDG alignment, decarbonisation leaders. We believe leaders can be assessed on either an absolute basis (vs. entire benchmark) or relative to sector peers.

2. Transition / Improver Strategies - Companies identified on the basis of their improvement potential and forward-looking trajectory in future periods, rather than leadership position now. Clear forward-looking targets/KPIs should be established and disclosed along with the time-horizon for improvement to be assessed, and any sell discipline should progress not meet stated criteria. (eg. Taxonomy-aligned Capex >10% current aligned revenue, companies achieving decarbonisaiton objectives over a specified time horizon, companies growing green revenue aligned to SDGs).

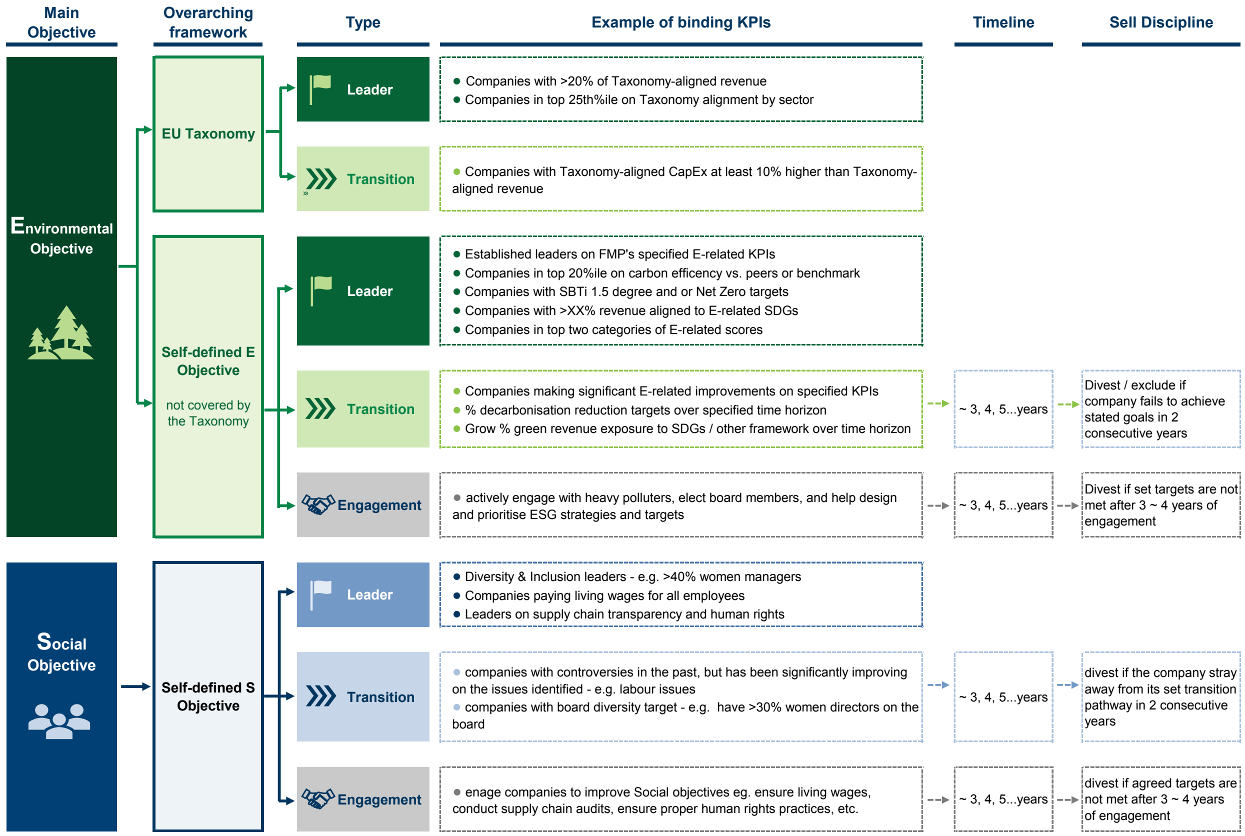
3. Engagement Strategies - Companies identified as having poor E or S related performance that FMPs intends to engage and improve overtime. Key E and S engagement objectives and definition of successful engagement should be made clear along with any sell discipline should improvements not be made over specified time horizon. Eg. Target heavy polluters to improve, targeting election of directors to board, engagement companies with limited disclosure to improve reporting. **The engagement option is critical for companies with limited disclosure, especially in emerging economies, from being excluded initially under the definition of SI, and allowing FMPs to catalyze positive E & S change.**

DNSH Test - While all companies designated as a 'sustainable investment' must also undergo a DNSH test against the mandatory PAIs, we believe the same strategies can apply, given that little prescription is made in how FMPs must incorporate DNSH assessments.

While we believe there is nothing that precludes FMPs from designating any investment as a 'sustainable investment' initially, we see time horizons and sell discipline as critical to ensuring not all companies can be designated as a 'sustainable investment' in perpetuity by the FMP. Attempts to use vague or weak / low thresholds could be criticised by clients as potentially not credible for SI, which may lead to market adoption of stricter thresholds naturally over time, helping to reduce greenwashing, a key objective of SFDR.

Exhibit 6: A framework for qualifying Sustainable Invesments

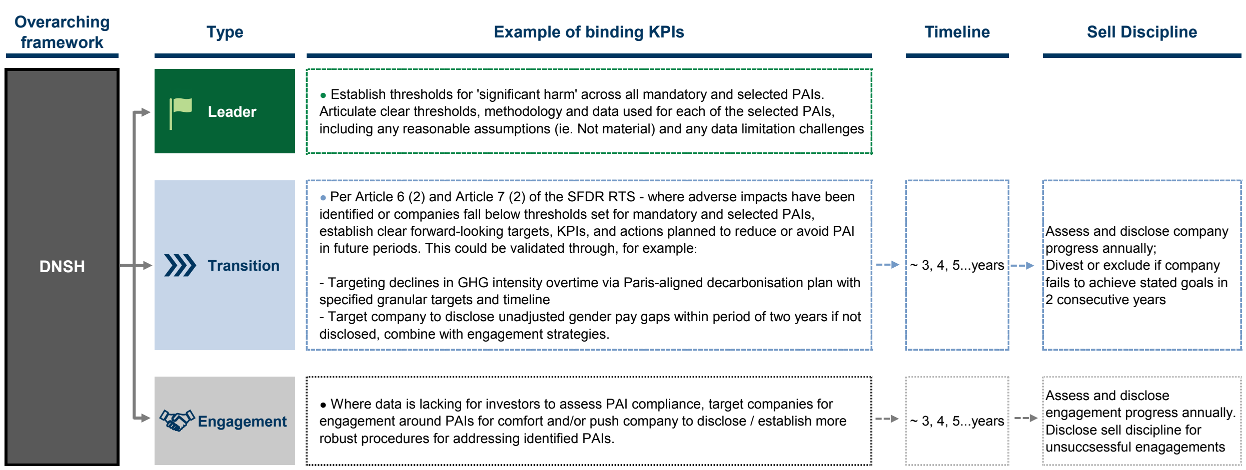
GS view on qualifying a framework for Sustainable Investment



Source: Goldman Sachs Global Investment Research

Exhibit 7: A framework for satisfying Do No Significant Harm (DNSH)

GS view on ensuring DNSH within SFDR



Source: Goldman Sachs Global Investment Research

Takeaways from the latest supervisory documents

1. Clarifications on the ESAs' draft RTS under SFDR - Covers use of Principal Adverse Impact indicators (PAIs) for Article 8/9 products, PAI calculation methodology, investment scope for PAI reporting, Taxonomy-related disclosures. **Key takeaways include:**

- PAIs must be reported per Article 7 SFDR, but usage for determining promotion of E&S characteristics (Article 8 funds) or overall 'sustainable impact' (Article 9 funds) is flexible.
- **Improver / momentum strategies can be applied to define 'sustainable investment' impact, allowing for flexibility in Article 9 strategies to own anything on the basis of a fund's 'strategy, intention, and execution', in our view.** The new clarification document makes it clear that PAIs can be used as sustainability indicators for Article 9 funds to measure the 'sustainable impact' of a fund by showing improvements of the investments against the indicators over time (Exhibit 8) .
- DNSH of the Taxonomy and DNSH requirements under SFDR apply separately, and must both be taken into account where relevant. DNSH under the Taxonomy has a very specific meaning and must be achieved to determine Taxonomy-alignment, while DNSH under SFDR is more flexible and up to tthe asset manager to decide if and how DNSH is being met.

Exhibit 8: Clarifications related to disclosure of principal adverse impact (PAI) of investment decisions on sustainability factors

Uses of "sustainability indicators"

5. The reference to sustainability indicators in the disclosures for financial products is to be understood with reference to the "sustainability indicators used to measure the environmental or social characteristics or the overall sustainable impact of the financial product" in Articles 10(1)(b), 11(1)(a) and 11(1)(b) SFDR. Therefore, the ESAs consider that the "sustainability indicators" and the indicators for principal adverse impact referred to in Article 4 SFDR, and Chapter II and Annex I of the draft RTS in the ESAs' final reports refer to different disclosures under the SFDR.

6. However, it is possible to use the indicators for principal adverse impact to measure the environmental or social characteristics or the overall sustainable impact of the financial product, e.g. by showing improvements of the investments against those indicators over time.

7. For the sake of clarity, the ESAs consider the following table with regards to three possible uses of the adverse impact indicators at financial product level:

Use of the PAI indicators	Related main disclosure sections
Disclosure of DNSH for sustainable investments under Article 2(17) SFDR: the use of PAI indicators is mandatory to demonstrate that an investment qualifies as a sustainable investment. The PAI indicators to be used are the ones in Table 1 of Annex 1 and any relevant indicators in Tables 2 and 3 of Annex I The ESAs consider that using PAI indicators to fulfil the DNSH of SFDR does not require any PAI consideration at entity level pursuant to Article 4(1)(a), 4(3) or 4(4) SFDR.	***Annex II/IV**: "how do/did the sustainable investments that the financial product partially intends to make/made, not cause significant harm to any environmental or social sustainable investment objective?"* ***Annex III/V**: "how do/did sustainable investments not cause significant harm to any environmental or social sustainable investment objective?"*
Disclosure of PAI consideration under Article 7 SFDR: the disclosure of PAI consideration at product level is set out in Article 7 SFDR and is not further specified except for fields in the templates to provide the information required by that Article.	***Annex II and III**: "does this financial product consider PAI on sustainability factors?"* ***Annex IV and V**: "how did the financial product consider PAI on sustainability factors?"*
Measurement of the attainment of environmental or social characteristics and the sustainabilityrelated impact (Articles 10(1)(b), 11(1)(a) and 11(1)(b) SFDR): sustainability indicators used to measure the attainment of the environmental or social characteristics (for Article 8 SFDR financial products) or sustainable investment objective (e.g. the impact of the financial product for Article 9 SFDR products) may include PAI indicators. There is no direct link between sustainability indicators and PAI indicators. The ESAs clarify that the use of PAI indicators as sustainability indicators to measure the attainment of environmental or social characteristics or impact of the sustainable investments does not require any prior PAI consideration at entity level pursuant to Article 4 SFDR or PAI consideration at product level pursuant to Article 7 SFDR.	***Annex II**: "what sustainability indicators are used to measure the attainment of each of the environmental or social characteristics promoted by this financial product?" // "What are (…) and how does the sustainable investment contribute to such objectives?"* ***Annex III**: "what sustainability indicators are used to measure the attainment of each of the sustainable investment objective of this financial product?"* ***Annex IV**: "How did sustainability indicators perform?" // "What were (…) and how did the sustainable investment contribute to such objectives?"* ***Annex V**: "How did sustainability indicators perform?"*

Source: ESMA

2. Joint ESAs' Report on the extent of voluntary disclosure of principal adverse impact under the SFDR

This document covers the ESA's review of voluntary entity-level PAI reporting under the level 1 text of SFDR. Observations for reporting on PAIs at an entity-level may be helpful to apply to product-level disclosures. The ESAs have been mandated to provide further guidance on PAI reporting at a product-level due by April 2023. Our industry conversations suggest that this initial deadline for further guidance will not likely be met.

Exhibit 9: Examples of disclosures practices on entity-level PAIs that could serve as gudiance for PAI and DNSH reporting at product-level

'Comply or explain'	Issue	Example (if applicable)	Assessment	Reasoning
4(1)(a)	Full PAI statement	Document prominent on the sustainability section of the website including a description of PAIs, indicators applicable to investments in investee companies, identification of PAIs, prioritisation of PAIs, methodology and data used for the assessment of each PAI, stewardship activities (engagement and voting) engagement policies and references to international standards, changelog	✓	This type of statement represents a clear example of voluntary disclosure (i.e. prior to the disclosure through the mandatory template in the Delegated Regulation) and easily accessible through web search
4(1)(a)	Limited PAI statement without any detail	FMP acknowledges the importance of disclosing transparency of PAI of investment decisions on sustainability factors without further details on methodology used	○	This type of statement, while strictly complying with Article 4(1)(a), does not provide any information on e.g. the methodology used for the assessment of adverse impacts, so this type of statement risks the disclosure becoming a tick box exercise
4(1)(a)	Efforts towards consideration of PAI	FMP provides a clear description of the process concerning consideration of PAI – while mentioning the lack of available data in a specific field, disclosure is still made based on national and international standards	✓	This statement is a helpful example to show efforts towards consideration of PAI while acknowledging the lack of data in certain fields
4(1)(b)	No consideration of sustainability adverse impact	FMP does not consider adverse impacts, as it says that PAI metrics have yet to be finalised, and reserves the right to voluntarily comply in the future, based on a regular/annual assessment	○	This type of statement under Article 4(1)(b) is considered a helpful example of FMPs not considering PAIs albeit it could include further information notably on 1) which PAI metrics the statement refers to by reference to the sustainability factors and 2) provide an estimate on when the FMP intends to consider such adverse impacts
4(1)(b)	Mixing criteria from Article 4(1)(a) or from Article 3 in the non-compliance statement	FMP states the decision not to comply with Article 4(1)(b) but includes in the same statement also elements on the integration of the FMP's integration of ESG risks, or adherence to responsible business codes and international standards	✗	This statement is considered potentially misleading for investors as it includes details / elements of ESG (integration of ESG risks or adherence to business codes or international standards) which are not relevant for an Article 4(1)(b) SFDR statement. The latter could be published in a separate section of the website
4(1)(b)	No consideration of sustainability adverse impact	FMP does not currently consider adverse impacts as the relevant data are not yet available on the market to a sufficient extent	○	This statement, while strictly speaking compliant with the rules, could also include details on whether and when the FMP plans to consider adverse impacts by reference to the sustainability factors.
4(1)(a)	Confusion between PAI and sustainability risks	FMP assesses the impact of the issuer's business on sustainability risks when making investment choices	✗	The statement under Article 4(1)(a) should only include considerations of adverse impacts, not of sustainability risks
4(1)(a) – 4(2)(d)	Alignment with Paris Agreement	FMP supports climate action in line with the objectives of the Paris Agreement	○	The simple statement of support to the objectives of the Paris Agreement, without further details about decarbonisation paths does not represent helpful transparency under Article 4(1)(a)
4(1)(a) – 4(2)(d)	Alignment with Paris Agreement	FMP includes credible decarbonisation objectives, upstream and downstream emissions, setting out scale and timeline for action to achieve the trajectories consistent with the Paris Agreement, aligning specific investments with carbon neutral trajectories	✓	This statement includes details on decarbonisation objectives as a way to disclose PAI of investment decisions
4(1)(b)	Statement refuses to take PAI into account	FMP believes that the targeted and systematic consideration of adverse impacts is not currently envisaged but there are substantial reasons to believe that their investment decisions have a positive impact on sustainability factors outlined under SFDR	✗	This statement is not helpful as it is based on vague explanations about why the FMP does not consider adverse impacts, yet claiming a positive impact on sustainability factors

✓ *Considered by the ESAs as good examples of best practices in the disclosures*
○ *Considered by the ESAs as examples where there is margin for improvement*
✗ *Considered by the ESAs as bad practices in the disclosures, which could be failures of compliance*

Source: ESMA

3. SFDR Q&A from the EU Commission – Covers product vs. entity level PAI reporting requirements, good governance requirements for Article 8 & 9 products, and Taxonomy reporting obligations for Article 8 & 9 products. **Key Takeaways:**

- Company investments in Article 8 and 9 funds must meet the 'good governance' provisions of RTS, however no definition of 'good governance' is provided signaling the definition is left to the financial market participant, same as other criteria of SFDR.
- Article 8 products that promote environmental characteristics are also required to report under the EU Taxonomy and assess whether any investments have Taxonomy-eligible and/or aligned revenue, where reliable data is available. **This verifies that essentially all Article 8 and 9 funds will need to report Taxonomy-eligibility and alignment.**

- Article 9 funds that target a social objective will also be required to report on EU Taxonomy exposure if underlying investments also contribute to an environmental objective.
- EU Taxonomy reporting must use reliable data and can use third-party providers to fill in gaps left by non-disclosure or non-EU companies by using 'complementary assessments and estimates'. The Platform on Sustainable Finance recently issued a proposal for defining 'equivalent information' under the Taxonomy - see GS SUSTAIN: EU Taxonomy Series: Platform updates to drive Taxonomy usability and adoption.
- Narrative disclosures around Taxonomy alignment or lack thereof on the basis of data availability should be avoided and risk non-compliance.
- Article 8 and 9 products are not required to make Taxonomy aligned investments, meaning there is no minimum requirement to invest in Taxonomy aligned activities. **Our view:** While Taxonomy alignment is not a requirement for Art. 8/9 products we see market pressure and financial incentives leading to greater adoption of the Taxonomy in investor decision-making overtime that will drive greater crowding, cheaper costs of capital, and higher valuations for companies that fit into the Taxonomy. *For further implications of the EU Taxonomy please read GS SUSTAIN: EU Taxonomy Series: Progress on the Journey to Alignment* .

4. ESMA new supervisory statement on SFDR / EU Taxonomy regulatory oversight - Document aimed at providing supervisory convergence to National Competent Authorities (NCAs) on oversight of SFDR and EU Taxonomy reporting for asset managers. **Key areas covered and takeaways include:**

- Verification checklists for funds and website disclosures
- Sustainability-related disclosures should not include boilerplate language with complex legal disclaimers or legal jargon. The information should be understood by average investors. Standardised text should not be used across different funds.
- Principles-based guidance on fund names including recommendations that funds containing the term 'sustainable' be reserved only for Article 9 strategies.
- 'Impact' funds should only be used by funds with the intention of generating positive, measurable social and environmental impact alongside financial returns.
- **When presenting disclosures, ESMA emphasis that Article 8 and 9 disclosures should not give the impression of a 'label' to investors.**

5. ESMA's Final Report on SFDR Amendments for Gas & Nuclear Activities - provides recommendation on adding specific disclosure to ensure transparency around investments in Taxonomy-aligned gas and nuclear activities. With the amended disclosure templates, investors need to identify where the financial product intends to invest in such activities, and if so, disclose the proportion of investments associated with these activities. The European Commission will review and either endorse or adjust the draft RTS within three months of publication.

6. Defining 'Sustainable Investments' - List of additional SFDR queries requiring

interpretation by the European Commission

The European Supervisory Authorities (ESAs) have submitted to the European Commission further queries relating to the interpretation of SFDR, including providing greater clarification on the definition of 'Sustainable Investments' within Article 2 (17), clarifying methodologies for 'Sustainable Investment' calculations, carbon emission benchmark reduction and benchmark requirements, meaning of PAI considerations, and employee thresholds for PAI entity-level reporting. **Below we provide our view of some covered questions related to the definition of 'sustainable investments' relevant for financial market participants (FMP).**

Article 2(17) SFDR

Question 1: How does the definition of "sustainable investment" in Article 2(17) SFDR apply to investments in funding instruments that do not specify the use of proceeds, such as the general equity or debt of an investee company? For example, would an investment in an investee company which has one economic activity, among several other economic activities, that contributes to an environmental or social objective (and none of the economic activities significantly harm any environmental or social objective and the company follows good governance practices) be considered to be a "sustainable investment" as a whole or in part?

In other words, assume a financial market participant that invests EUR 100.000 in the general equity of an investee company which follows good governance practices. None of the investee company's economic activities significantly harm any environmental or social objective, and that investee company reports that 20% of its economic activities contribute to environmental or social objectives. Can the financial market participant consider (1) the entire holding (EUR 100.000) as a "sustainable investment" according to Article 2(17) SFDR; or (2) only 20% of that holding (i.e. EUR 20.000) as a "sustainable investment" according to Article 2(17) SFDR?

Our View: This question is getting to the topic of defining different approaches for capturing the %s of 'sustainable investments' (SI) where two options are currently taken by the market, either: 1) pass/fail view of SI (depending on if thresholds are met) where entirety 100% of asset qualifies as SI or 2) a proportional view of SI taken from revenue percentages qualifying as SI. In our view, the only compatible method for defining SI is the Pass/Fail method given that a proportional view cannot be calculated for portfolios where the environmental or social objective relates to the operational element of an economic activity. For example, funds with decarbonisation objectives are by definition Article 9 (3) and are typically executed via looking at operational factors of the business — GHG intensity versus peers and/or % GHG reductions in alignment with Paris overtime, or companies with established Science Based Targets (SBTi). A company that is decarbonizing in alignment with net-zero emissions and may be designated as a Sustainable Investment on the basis of a decarbonisation objective cannot easily show a proportional view – meaning only 100% of the company may be designated. Similar for S objectives – companies that pay living wages for all workers and in the supply chain /

have leadership performance on D&I or worker engagement, supply chain human rights performance and transparency, can also not easily be captured in a proportional view.

The definition of Article 2 (17) is intentionally broad to accommodate both a revenue and operational view of E&S objectives that an FMP may define, therefore a proportional view would be incompatible with specific operational elements highlighted in the definition of SI under Article 2 (17). For example, "key resource efficiency indicators… raw materials… production of waste" are operational in nature and not associated with a particular economic activity.

Where thresholds for qualifying companies as SI — for example >10% revenue aligned to the Taxonomy, or companies with 1.5 degree aligned Science-based Targets – a clear statement by the FMP would allow for end-investors to compare the quality and credibility of the FMP's definition for SI. Attempts to use vague or weak / low thresholds could be criticised by clients as potentially not credible for SI, which may lead to market adoption of stricter thresholds naturally over time, helping to reduce greenwashing, a key objective of SFDR.

Potential risks of a proportional view: A proportional view could run the risk of leading to further crowding of companies that have a high % of revenue that is aligned to an E or S objective and also risks leading to limited to no recognition for companies that have lower levels of alignment to E&S objectives initially (eg. Taxonomy alignment for cement companies), yet may be leaders versus peers and improving environmental and social outcomes over time. For example, an aluminum company with only 30% alignment to the Taxonomy, could be seen as inferior to a pure play wind power / solar manufacturer which is 100% aligned for defining SI under a proportional view, despite the aluminum company contributing significantly to low carbon objectives. FMPs should be able to define thresholds across sectors for designating what could qualify as an SI given that different thresholds may be appropriate based on industry materiality.

Question 2: How should "investment in an economic activity that contributes to an environmental objective" or "investment in an economic activity that contributes to a social objective" in Article 2(17) SFDR be interpreted? Are any (or all) of the following features sufficient for an economic activity to meet the definition of Article 2(17) SFDR, i.e. to contribute to an environmental (or a social) objective?

Our View: All of the below should count if the intention of SFDR is to be a disclosure / transparency regulation and not a label, which allows the FMP to self-designate their definition of SI with clear disclosures, KPIs, data limitations, etc. End-clients can then assess the credibility of such claims. In our view, the definition of Sustainable Investments could be viewed as akin to any fundamental activity alpha strategy – which can be executed in a number of different ways as defined by the FMP, for example – value, growth, quality, small-cap, mid-cap, large-cap, blend strategies. Sustainable investment objectives can be achieved in a number of different ways – rewarding leaders, incentivising improvers, and/or engaging companies to change.

a) Should the economic activity being carried out by the investee company in

itself contribute to an environmental or social objective (for example, an issuer investing in micro-finance activities in the developing world to assist in the development of socially disadvantaged communities)?; and/or

Our View: Yes, this would be applicable especially for companies qualifying as aligned under the EU Taxonomy or an FMP's own revenue classification framework, such as the SDGs, etc. Thresholds and KPIs used by the FMP should be clearly disclosed in the technical annex templates of the RTS.

b) Can any economic activity potentially contribute to an environmental or social objective simply because it is carried on in a sustainable manner by the investee company (examples: (1) an investee company manufacturing a product in a more environmentally sustainable way than its peers/the sector, or (2) an undertaking that stands out for its social impact, for instance through its HR management or the representation of women); and/or

Our view: Yes, this would be compatible with the operational components highlighted within Article 2(17) – for example "key resource efficiency indicators… raw materials… production of waste". This view would also be consistent with Article 9 (3) which says that decarbonisation objectives must qualify as Article 9 funds and thus ultimately define securities as 'sustainable investment'. The objective of decarbonisation is mainly executed via operational factors. Additionally, on the S side, key wording in Article 2 (17) makes reference to some factors that can only be taken via operational components – e.g. labour relations, investment in human capital, etc.

FMPs should make clear what the binding elements are on a company's operations that are used to qualify a company as a 'sustainable investment'.

c) Can any economic activity contribute to the general environmental objective of climate change mitigation if it is only covered by a transition plan (for instance a plan aiming to reach climate-neutrality based on the ACT methodology)?

More generally, can any economic activity contribute to an environmental or a social objective solely because the company that carries out such an activity makes commitments towards, or adopts a strategy aiming at, reducing its environmental or social harm (referring for instance to the SBTi methodology)?

Finally, where there is a transition plan or strategy aiming to achieve that the whole investment does not significantly harm any environmental and social objectives (without actively contributing to environmental or social objectives), could that investment be considered "sustainable" under Article 2(17) SFDR?

Our view: Yes, transitional companies should be compatible with Article 2 (17) given the definition is up to the FMP, who might set a clear investment objective of selecting companies improving / transitioning overtime. Also by definition, any decarbonisation funds are transitional given a majority of the economy is not yet net-zero aligned. Funds with decarbonisation objectives are also Article 9 (3) by definition and must fulfill the SI criteria. Additionally, transition – brown to green is covered as green under the EU Taxonomy's activity of 'Renovation of existing buildings' which allows buildings improving energy performance by 30% to be classified as Taxonomy-aligned (Green). Taxonomy alignment can clearly be used as a method for qualifying a company as a 'sustainable investment', so if transition outcomes were not to be allowed it would create inconsistencies between SFDR and the EU Taxonomy. Therefore, ability to allow for a forward-looking element to the definition of SI is critical to align Article 8 / 9 portfolios with real economy outcomes. Where the basis of SI is made on forward-looking elements – FMPs should clearly disclose the KPIs, the time horizon of which the issuers performance is to be assessed, and any sell discipline should forward progress / transition not be made by companies initially designated as an SI. This would mean that not all companies can be designated as SI by an FMP in perpetuity where they are not making progress against the funds stated E or S objectives.

On this basis, clarification of the DNSH criteria may also be needed to make it clear that forward-looking views on reducing DNSH can be made. This appears to be the case as expressed in Article 6 (2) of the SFDR RTS, which states 'actions planned or targets set for subsequent periods…to avoid or reduce the principal adverse impact identified', but may require further clarification. For example, where companies may be high carbon emitters today, but transitioning and aligning with net-zero outcomes. This is particularly relevant to align the DNSH criteria with the EU Taxonomy where companies in cement, aluminum, steel, utilities may be very high emitting versus benchmark or peers (potentially flagging as doing harm on the GHG PAIs in year FY0), yet have high levels of EU Taxonomy aligned revenue or capex versus peers signalling strong performance and improvement over time.

Disclosure Appendix

Reg AC

We, Evan Tylenda, CFA, Grace Chen, Brendan Corbett, Rachit Aggarwal and Madeline Meyer, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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