

SSF Spotlight

The Role of Derivatives in Sustainable Investing

A practical guide to addressing sustainability-related challenges
linked to the use of derivatives in sustainable portfolios

Contents

Executive Summary — p.4

1. Introduction — p.6

2. The Role of Derivatives in Sustainable Products — p.7

3. Sustainability-related Challenges linked to the Use of Derivatives — p.9

3.1 Index Futures (Stocks or Bonds) — p.9

3.2 Single Stock or Bond Futures — p.10

3.3 Foreign Exchange (FX) Futures — p.11

3.4 Credit Default Swaps (CDSs) — p.12

3.5 Structured Products — p.13

4. SSF Guidance — p.15

4.1 Market Signal and Exposure — p.15

4.1.1 Threshold for Index Futures (Stocks or Bonds) — p.15

4.1.2 Use of Index Futures based on ESG Indices — p.15

4.1.3 Neutral Investment Category for FX Futures and CDSs — p.15

4.2 Ownership Rights — p.15

4.2.1 Stewardship Policy — p.15

4.3 Transparency — p.16

4.3.1 ESG Metrics of Underlying Assets — p.16

4.3.2 ESG Metrics of Issuers of Structured Products — p.16

4.3.3 Netting ESG Metrics of Derivatives and Traditional Assets — p.16

5. Conclusion — p.18

6. Case Studies: Use of Derivatives in Sustainable Investment Products — p.19

6.1 Case Study: Equity Index Futures — p.19

6.2 Case Study: Credit Default Swaps (CDSs) in Sustainable Fixed-Income Products — p.21

Executive summary

The Spotlight report "The Role of Derivatives in Sustainable Investing" identifies sustainability-related challenges linked to the use of derivatives in portfolios that follow sustainability objectives. It covers the use of derivatives in sustainable funds and mandates. The key sustainability-related challenges identified in the report are linked to the following three client-relevant aspects: market signal and exposure to

underlying assets, related ownership rights and transparency in reporting. This report provides guidance for asset and wealth managers on how the use of such instruments can best be aligned with defined sustainability objectives and made more transparent. The following table provides an overview of the sustainability-related challenges identified and the corresponding guidance:

Derivative Instruments	Implications of the Use of Derivatives		
	Market Signal and Exposure	Ownership Rights	Transparency
Index Futures (Stocks or Bonds)	Index futures exposure might violate the sustainability objectives (e.g. exclusions).	There is no control of ownership by the asset manager.	ESG metrics can be assigned to standard indices. It can be a challenge to obtain ESG metrics for indices with illiquid underlying assets.
Guidance	<ul style="list-style-type: none"> — Use index futures while applying a self-selected, time-weighted exposure threshold. — Use ESG index futures to meet the defined sustainability objective. 		<ul style="list-style-type: none"> — Report the applied threshold and provide transparency on ESG metrics of index in reporting where possible.
Single Stock or Bond Futures	Single stock or bond futures exposure can be managed according to sustainability objectives.	There is no control of ownership by the asset manager.	Different options to aggregate the underlying ESG metrics for the reporting.
Guidance			<ul style="list-style-type: none"> — Use ESG metrics of the derivatives' underlying assets in line with delta-adjusted exposure. — Choose an appropriate way to net the ESG metrics related to the asset exposure.¹

¹ The report suggests four ways to net the ESG metrics in section 4.3.3.

Derivative Instruments	Implications of the Use of Derivatives		
	Market Signal and Exposure	Ownership Rights	Transparency
Foreign Exchange (FX) Futures	FX exposure has no impact on the sustainability objectives.	There are no ownership rights related to FX.	FX exposure cannot be linked to ESG metrics.
Guidance	— FX futures remain in a neutral investment category.		— Attribute FX future positions to a neutral investment category (no ESG metrics).
Credit Default Swaps (CDSs)	Single-name CDS exposure can be managed according to sustainability objectives. Index CDS exposure might violate the sustainability objectives (e.g. exclusions).	There are no ownership rights related to CDSs.	It can be a challenge to link ESG metrics to the CDS exposure.
Guidance	— Index CDSs remain in a neutral investment category.		— Attribute single-name and index CDS positions to a neutral investment category (no ESG metrics).
Structured Products	Structured products exposure can be managed according to sustainability objectives.	There are no direct ownership rights, as the counterparty acquires ownership when physically hedging the position.	Structured products are issued by a known counterparty and consist of known underlying assets.
Guidance		— Choose an issuer of structured products with a high sustainability performance and an established stewardship policy.	— In addition to using ESG metrics of the underlying assets on a delta-adjusted basis, provide transparency on the issuer's ESG metrics.

Table 1: Implications of the use of derivatives for three identified client-relevant aspects

1 Introduction

With the rise of sustainable investing globally and in Switzerland, clients are demanding more sophisticated approaches and greater transparency on the sustainability objectives, both of which have become the focus of the financial industry.² While negative exclusion strategies and ESG integration remain the most commonly applied sustainable investment approaches, more advanced approaches, including impact-investing or stewardship, are gaining importance and receiving greater attention from clients.

According to AMAS and SSF, there are three main reasons why investors apply sustainable investment approaches: they want to align their portfolio with their specific values, achieve a better risk/return profile and/or have a positive impact on the real world.³ Asset and wealth managers use derivative instruments and structured products for both funds and mandates to meet financial targets and support an efficient portfolio construction and liquidity management. Such instruments are equally relevant for conventional and sustainable portfolios. Yet, in the context of sustainable investments, the use of derivatives can have implications for the achievement of the defined sustainability objectives. Asset managers and wealth managers⁴ therefore need to consider the effects of using derivatives and provide transparency on their use for sustainable investment products.

This report explores the role of derivatives in the context of sustainable funds and mandates, including structured products. First, an overview of different types of derivatives is provided. Second, the report identifies key sustainability-related challenges linked to the use of derivatives by describing their effect on three client-relevant aspects: market signal and exposure to underlying assets, related ownership rights and transparency in reporting. Third, it offers guidance to asset managers on how to address the identified challenges and meet transparency requirements of their clients. Finally, case studies from asset managers illustrate examples of practical implementation.

² See SSF (2023). *Swiss Sustainable Finance Market Study*, available at: https://marketstudy2023.sustainablefinance.ch/wp-content/uploads/2023/06/SSF_2023_MarketStudy.pdf.

³ See AMAS & SSF (2021). *How to Avoid the Greenwashing Trap: Recommendations on transparency and minimum requirements for sustainable investment approaches and products*, available at: https://www.sustainablefinance.ch/upload/cms/user/RecommendationsforSustainableInvestmentProducts_AMAS_SSF.pdf.

⁴ In the rest of the report the term “asset manager” is used for all types of investment managers and includes wealth managers and banks.

2 The Role of Derivatives in Sustainable Products

Definition of Derivatives

Derivatives are financial contracts whose value is derived from the price of an underlying market factor, such as stock prices.⁵ Derivative instruments are generally used for hedging against risks associated with underlying market factors, e.g. protecting an investment against unanticipated price changes of the underlying assets. Further, derivatives can provide exposure to underlying assets, especially to efficiently invest in indices or gain access to illiquid markets. Unlike spot contracts, which are settled immediately, derivatives are forward contracts with future delivery and payment dependent on underlying assets. The contract can include optional rights or obligations to buy or sell the underlying. While exchange-traded derivatives are traded on a stock exchange, over-the-counter contracts (OTC) are agreed between two parties without being listed on a centralised exchange.

The buyer and seller of the derivative gain a delta exposure, which is defined as the sensitivity of the derivative price in relation to the underlying asset(s). A delta of 1 means that if the price of the underlying asset changes by CHF 1, the derivative's price will also change by CHF 1. Accordingly, if the derivative has a delta of 0.5, a CHF 1 change in the price of the underlying asset will result in a CHF 0.50 change in the price of the derivative. Derivatives with a contingent claim (options) have a delta between 0 and 1 (call) and between -1 and 0 (put),

while derivatives with forward commitments (futures, forwards and plain vanilla swaps) are considered delta 1 instruments. In a derivative transaction, the deltas of the buyer and seller of the derivative offset each other.

Asset managers can use delta to hedge the risk of price fluctuations in portfolio assets. Delta can also be used to assess the exposure of a portfolio of traditional assets such as stocks and bonds and derivatives. This can be done by summing up the delta-adjusted values relative to the underlying assets of the derivatives and the traditional assets. For stock and bond futures, the delta is 1, i.e. the stock and bond exposure is equal to the market value of the underlying assets. For other derivatives, the delta may not be 1, so the individual exposure is calculated by multiplying the delta of the derivative by the market price of the underlying asset.

Value Chain of Derivatives and Implications of their Use

The client (investor) of an asset manager can buy shares of a fund or invest in the form of a mandate, containing traditional assets, derivatives as well as structured products. Asset managers manage these products by trading assets with corresponding counterparties at equity, debt and/or derivatives markets. Figure 1 provides a general overview of the parties involved in such transactions.

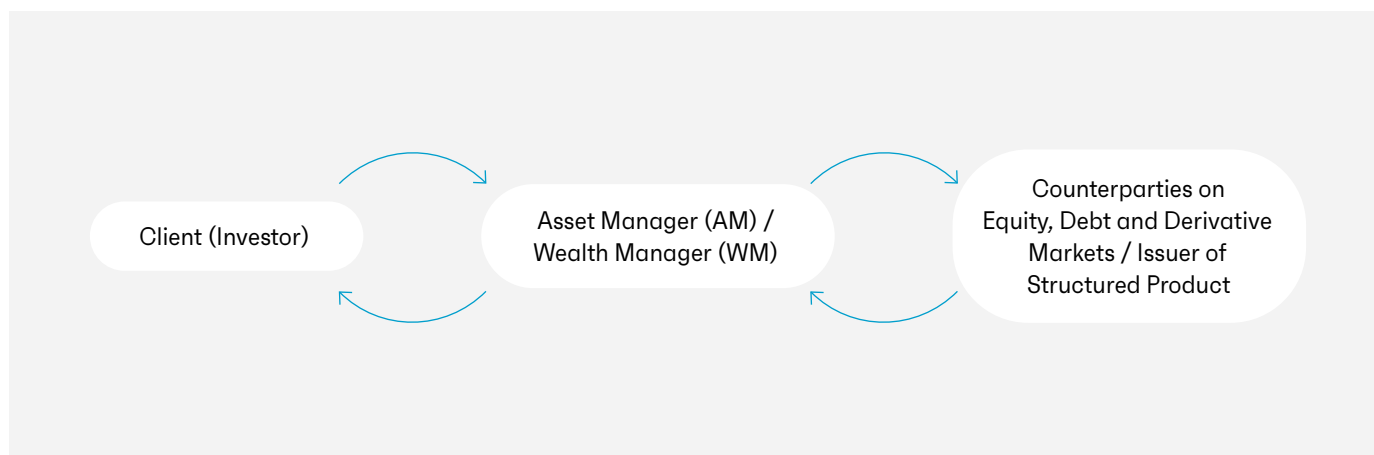


Figure 1: Parties involved in transactions of asset and wealth managers on behalf of their clients

⁵ For an overview on derivatives see Hull (2021). *Options, Futures, and Other Derivatives* (11th edition). London: Pearson.

Buying or selling a derivative gives the buyer or seller a “long” or “short” exposure to the underlying asset. As short positions match long positions, the sum of the market values and risks of all negative positions is zero. While the transaction of the contract does not result in a direct market signal from the buyer, the counterparty needs to hedge its position by buying or selling the underlying asset (physical) or a derivative contract (synthetic) according to its delta, which results in a market signal.

By setting up a physical hedge position, the counterparty obtains the actual position of the underlying asset in its hedge portfolio and thus corresponding legal ownership rights. Through the derivative, the investor is exposed to both the risk and return of the underlying, but the ownership rights cannot be directly exercised.

If the asset manager uses derivatives in portfolio management, these can have an effect on achieving the client's investment objectives. Asset managers are therefore obliged to inform their clients transparently about the investments contained in a fund or mandate. This includes information on the use of derivatives and structured products, and the related exposure.

Sustainability Objectives and related Transparency

Asset managers offering sustainable products to their clients are obliged to align them with defined sustainability objectives. It can be considered good market practice to provide clients with transparency on the achievement of the defined sustainability objectives. Transparency on sustainability objectives can cover sustainability performance based on specific ESG metrics, e.g. indicators on climate change, social indicators, or aggregated ESG ratings, and can include information on stewardship activities (e.g. voting or engagement results). If derivatives are used, such instruments can have implications for the achievement of the defined sustainability objectives and the related reporting.

ESG Derivatives

In practice, derivatives with specific ESG objectives already exist and, although there are no standard terms and definitions, can be subsumed under the term “ESG derivatives”.⁶ For example, both parties to a derivative contract can agree to set ESG targets for the counterparty ex ante and link the premium to the achievement of targets, i.e. pay a lower premium if targets are met. Such structures can be set up individually in the OTC market with different sustainability objectives.⁷

6 See also White & Case (2021). *ESG derivatives*, available at: <https://www.whitecase.com/insight-our-thinking/esg-derivatives>.

7 For an overview of ESG-related derivatives, please also see ISDA (2021). *Overview of ESG related Derivatives Products and Transactions*, available at: <https://www.isda.org/a/qRpTE/Overview-of-ESG-related-Derivatives-Products-and-Transactions.pdf>. For a review of the influence of derivatives on the achievement of sustainability objectives, see Centre for European Policy Studies (2020). *Derivatives in Sustainable Finance*, available at: <https://www.ceps.eu/download/publication/?id=29791&pdf=Derivatives-in-Sustainable-Finance.pdf>.

3 Sustainability-related Challenges linked to the Use of Derivatives

This report identifies key sustainability-related challenges linked to three client-relevant aspects that can have an impact on the achievement of sustainability objectives. First, the challenge that the use of derivatives might lead to unintended market signals and exposure. Second, the challenge that investors cannot execute a steward policy due to lack of ownership rights. Third, the challenge for asset managers to provide full transparency on the ESG metrics of derivatives exposures.

3.1 Index Futures (Stocks or Bonds)

Mechanisms of Instrument

Indices play an important role in financial markets as they track the performance of regions, sectors or entire economies. They provide investors with information on comparable asset prices and make markets investable. An index can help to gain exposure to specific sectors, markets or regions in a simple and efficient way, as broad exposure is gained without having to directly buy all the underlying assets. While investors cannot directly invest in an index, they can do so through an index fund. Alternatively, an investor can gain exposure to an index through derivatives, such as listed index futures. In a portfolio context, a fund manager can use index futures to place large inflows in order to efficiently gain exposure to markets and manage risk appropriately. While a future is a binding agreement to buy at a specified future date, contracts can be settled by netting the long and short positions, or an investor can obtain constant exposure by rolling the contracts.

The client gains positive or negative exposure to an index future when an asset manager buys or sells the derivative from an anonymous counterparty. Figure 2 shows the parties involved in the transactions of an index future.

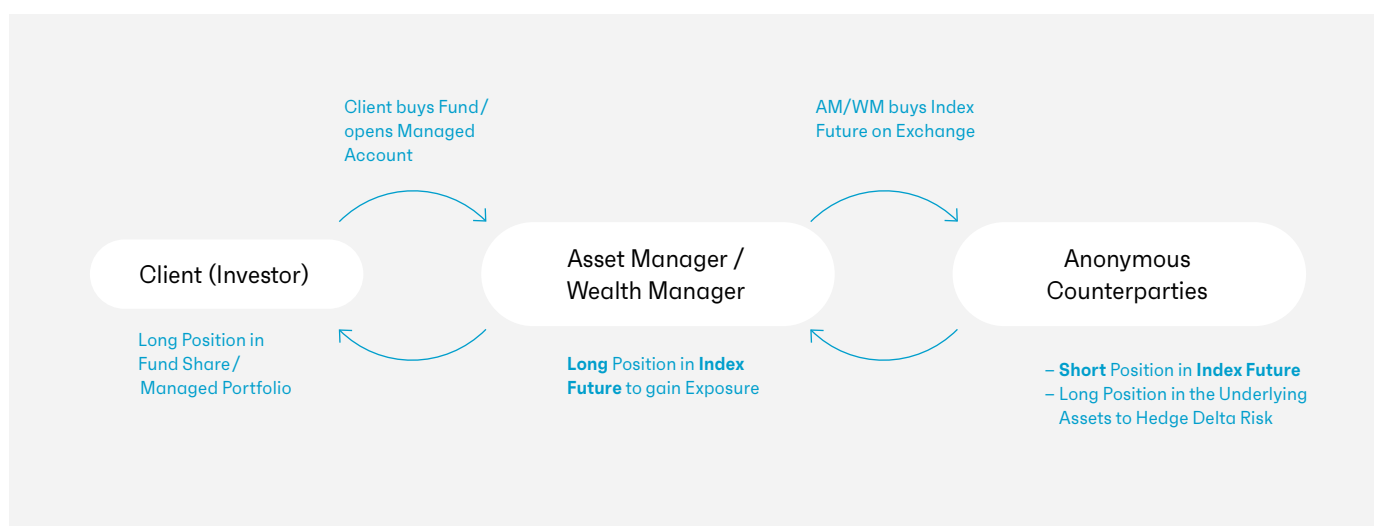


Figure 2: Parties involved in transactions of index futures with underlying stocks or bonds

Related Challenges

Market Signal and Exposure

By buying an index future based on assets such as stocks, the asset manager does not create a direct market signal, but influences the market price as it is assumed that the counterparty hedges its exposure against the sold derivative.

When buying an index future, the asset manager gains exposure to all constituents of the index. From a sustainable investor's perspective, this can result in the client indirectly being linked to underlying assets that do not meet the sustainability criteria defined for the fund or mandate (e.g. best-in-class or exclusion criteria).

Ownership Rights

If an asset manager buys an index future to gain long exposure to the index constituents, they do not receive corresponding legal ownership rights. Instead, the seller of the derivative, who can hedge the position with a physical position in the underlying asset, has the respective ownership rights. For an equity index future, this means voting rights can only be exercised by the unknown counterparty. It is therefore not possible for an asset manager to actively follow a stewardship policy for the whole portfolio.

Transparency

The index future provides exposure to a basket of underlying assets. As its price is directly correlated to the price change of the underlyings, its delta is considered to be one. Consequently, the financial and sustainability performance of the derivative is equal to that of a portfolio consisting of the underlying assets. Hence, ESG reporting should cover all the index constituents. It can be challenging to provide sustainability reporting that covers all constituents of an index future, as ESG metrics are sometimes difficult to obtain. This is particularly true for index futures based on illiquid underlyings, for which ESG metrics often rely on estimates and extrapolations.

3.2 Single Stock or Bond Futures

Mechanisms of Instrument

Compared to index futures, which provide exposure to broad markets and sectors, futures based on a single stock or bond offer the opportunity to take a long or short position in a single underlying asset. Single stock or bond futures are predominantly used to gain short-term exposure, with the objective of hedging financial risk against market changes or gain exposure to illiquid underlyings. Furthermore, as there are often regulatory restrictions on short selling, these derivatives offer an effective way of gaining negative exposure without having to borrow the actual stocks. As outlined for index futures in section 3.1, asset managers can trigger a buy signal for the respective underlying asset by the counterparty (Figure 3).

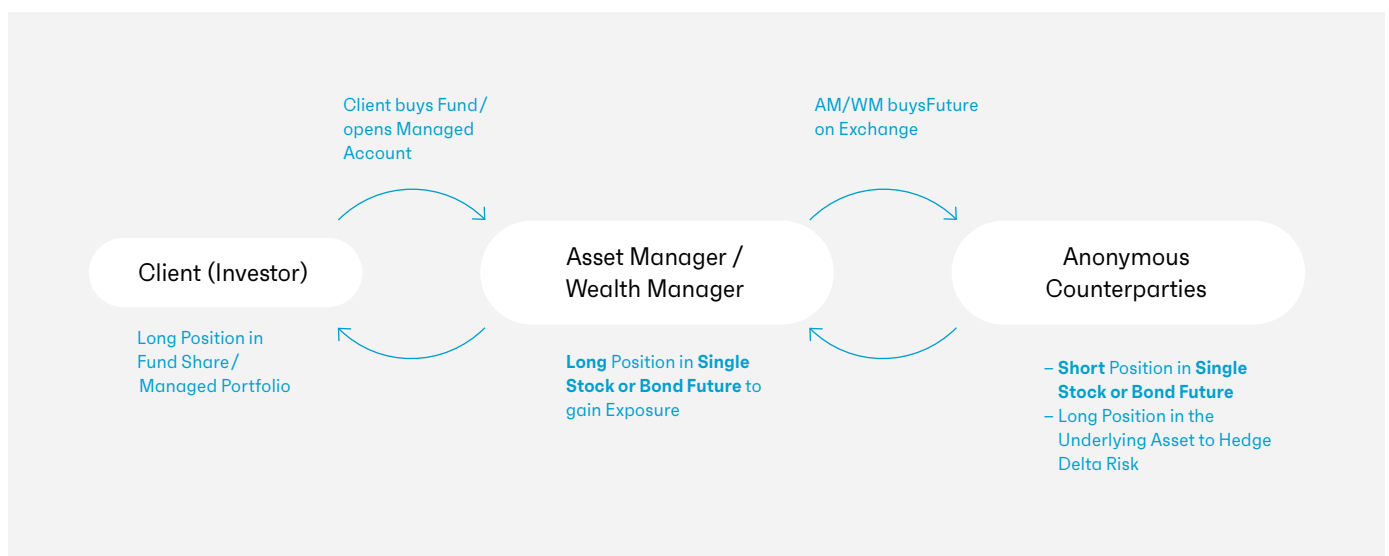


Figure 3: Parties involved in transactions of single stock or bond futures

Related Challenges

Market Signal and Exposure

By buying a single stock future in a fund, the asset manager gains exposure to a single stock and therefore, unlike buying an index future, can control the client's exposure to the underlying asset. From a sustainable investor's perspective, the use of single stock or bond futures can be appropriately managed to meet the defined sustainability criteria (e.g. exclusion, best-in-class approaches) and therefore does not pose specific challenges from a market signal and exposure perspective.

Ownership Rights

When an asset manager buys a future based on a single stock or bond, the client gains a long exposure to a single underlying asset without acquiring any legal ownership rights. Even if the unknown counterparty of a listed derivative takes a physical hedge position, the asset manager has no way of applying a stewardship approach.

Transparency

For an underlying stock or bond, ESG metrics are clear and can therefore be included in the reporting of aggregated ESG ratings of portfolios. As the future provides exposure to a single underlying, it can be treated for transparency purposes on a delta 1 basis relative to the underlying asset.

In the case of negative exposures through short positions, asset managers are faced with the challenge of how to

integrate respective ESG metrics into aggregated portfolio ESG ratings. The question arises as to whether such positions should be netted with long exposures in the same underlying or whether a short exposure needs to be reported in a different way than a long exposure.

3.3 Foreign Exchange (FX) Futures

Mechanisms of Instrument

Diversified investment portfolios usually include traditional assets such as stocks or bonds denominated in different currencies. This comes with the risk of experiencing a loss in the portfolio value through foreign exchange (FX) rates changes.

To hedge against currency volatility, FX derivatives such as FX futures represent binding agreements which are made in advance to fix a foreign exchange rate for a specified future date. The pricing of such contracts depends on three factors: the current exchange rate (spot), the interest rate difference between the two currencies and the duration of the future exchange contract. The pricing doesn't include a forward-looking component such as a forecast of future exchange rates beyond the current level of the exchange rate.

Figure 5 shows the asset manager hedging FX risk by taking a short position in the FX future. The corresponding counterparty is long in the FX future and short in the underlying currency.

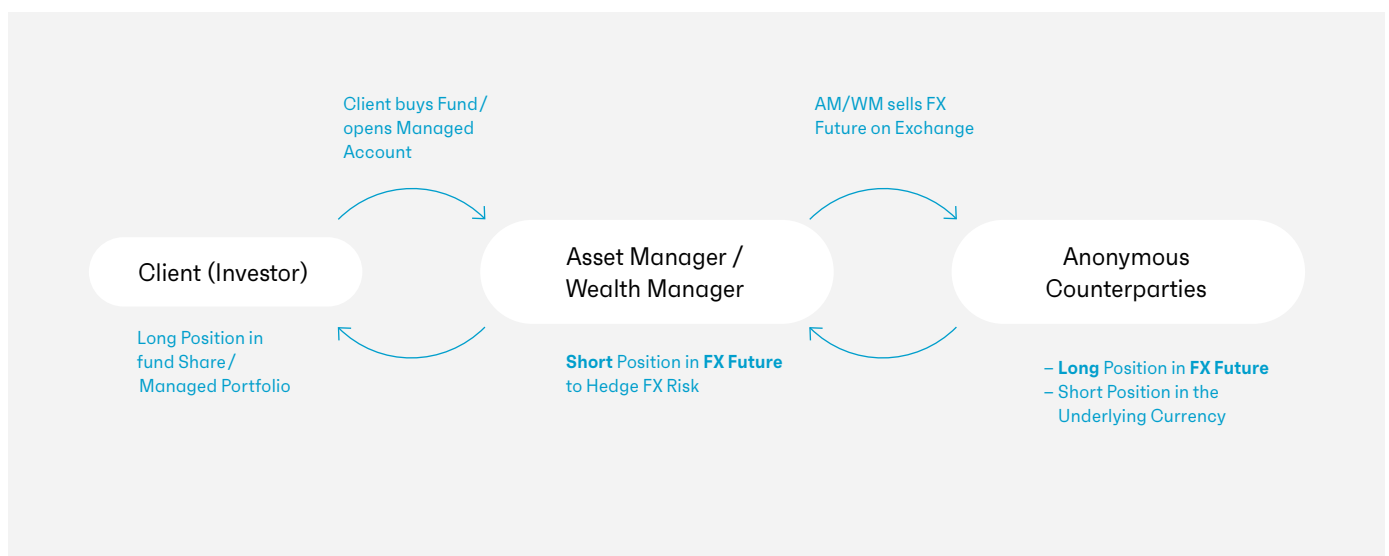


Figure 4: Parties involved in transactions of FX futures

Related Challenges

Market Signal and Exposure

FX futures are used in funds to hedge the currency risk of assets. By buying or selling a FX future, the asset manager gains exposure on one side of the currency pair and the counterparty gains exposure to the other side. From a sustainable investor's perspective, the use of FX futures has no implications for sustainability objectives.

Ownership Rights

The asset manager gains exposure to a currency, yet this is not linked to any ownership rights relevant for sustainable investors. Hence, there is no related challenge.

Transparency

In general, financial reporting provides insight into the use of FX futures. Although in some cases linked to a country, the issuer of the currency is a central bank.⁸ From a sustainable investor's perspective, it is not possible to link this exposure to any ESG metrics. Hence there is no sustainability-related challenge linked to the reporting of FX futures.

8 Currencies are treated differently from government bonds, where ESG metrics such as the energy intensity of a country's GDP can be used for analysis. For example, US Treasuries may be excluded on the basis of a sustainable investment approach, but US Dollars are allowed, as currencies are considered a neutral investment category with no implications for sustainability objectives.

3.4 Credit Default Swaps (CDSs)

Mechanisms of Instrument

Credit default swaps (CDSs) are used to protect the buyer of credit, i.e. a bond, against credit events, such as the default of an issuer.⁹ CDSs are usually traded over-the-counter (OTC) and are individually contracted between two parties based on a reference entity in line with certain industry standards, so-called single-name CDSs.¹⁰

CDS contracts can also be based on the default event of a number of reference entities in order to hedge or gain exposure to the credit market in a particular sector or region. In the contract, both parties can specify the number of credit events required to settle the agreement. A standardised way of gaining exposure to a portfolio of entities is through a CDS index.

In a fund, the asset manager can use CDSs in two ways: First, the asset manager can buy the CDS (long) to either hedge against the existing credit risk in the underlying bond or, without owning the underlying, to potentially profit from a credit deterioration event. This allows the asset manager to transfer the credit risk associated with the reference entity to the counterparty.¹¹ Second, the asset manager can sell the CDS (short) to gain exposure to the credit markets, thereby harvesting the credit premium of the issuer without buying the underlying bond. One motive for short-selling a CDS rather than buying the underlying bond can be the illiquidity of the bond itself.

As outlined above, when an asset manager is short in the CDS, the investor gains exposure to the credit market, assuming the reference entity doesn't default. Figure 6 shows the client's exposure to the credit market assuming that the counterparty is long in the CDS and the underlying bond to hedge the CDS position.

9 For a discussion on the use of CDSs in investment funds see ESMA (2021) Working Paper No.1, *Funds and single-name CDS: Hedging or Trading*, available at: https://www.esma.europa.eu/sites/default/files/library/esma_wp-2021-01.pdf.

10 For example, standardised practices and processes are proposed by the International Swaps and Derivatives Association (ISDA) Master Agreement, see also <https://www.isda.org/tag/master-agreement/>.

11 Long positions in CDSs, together with a long position in a corresponding bond, can be used to implement a negative-basis strategy to take advantage of favourable corporate bond pricing relative to the corresponding CDS. The price difference (negative basis) can provide the counterparty with a positive residual return despite minimised default risk.

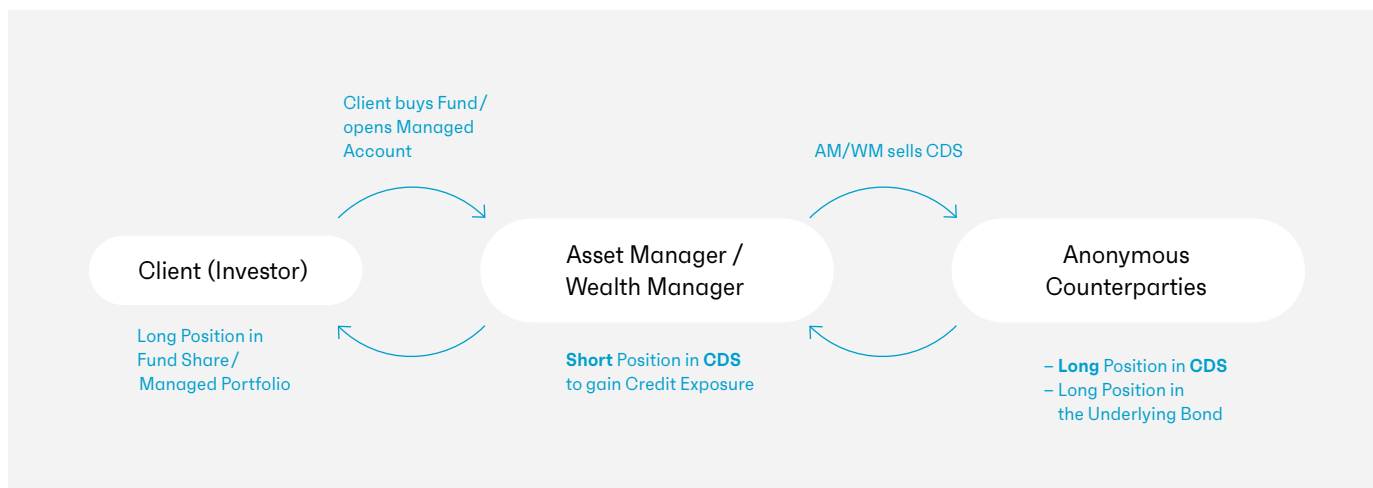


Figure 5: Parties involved in transactions of a CDS

Related Challenges

Market Signal and Exposure

When the asset manager gains exposure to a CDS, the counterparty could hedge the CDS position by buying the underlying bond. Hence, we can infer there is a market signal.

By buying or selling the CDS, the asset manager obtains credit protection or credit exposure. From a sustainable investor's perspective, the exposure to a single-name CDS can be managed adequately, by excluding issuers of bonds that do not meet sustainability objectives. Index CDSs, which provide the investor with exposure to the broader credit markets, can affect the sustainability objectives (e.g. exclusion of bond issuers) and therefore pose a challenge to the asset manager.

Ownership Rights

From a sustainable investor's perspective, it is possible for bond holders to implement an engagement strategy. In contrast to directly owning a bond, buying or selling CDSs does not provide the opportunity to execute a stewardship policy.

Transparency

The CDS market can be complex, with limited transparency. In the aftermath of the financial crisis of 2008, CDS contracts have been made transparent to regulators and increasingly centrally cleared, resulting in a higher overall transparency of OTC derivatives markets.¹²

CDS contracts relate to credit events of one or more entities. From a sustainable investor's perspective, the challenge with CDSs is whether it is possible to use a delta-adjusted approach to link an ESG metric to the exposure.

3.5 Structured Products

Mechanisms of Instrument

Structured products are financial instruments that combine one or more traditional assets (e.g. a bond) with a derivative (e.g. an option), to create a specific risk-return profile tailored to the needs of an investor. Structured products can be used for participation, yield enhancement, capital protection or hedging. They offer solutions that can be adapted to the investor's desired investment strategy, maturity, investment amount and payoff at maturity. Compared with a fund, where the investor's assets are generally held in a separate custody account as special assets, structured products are regularly bearer bonds. The quality of a structured product therefore depends on the creditworthiness of the issuer as debtor.

Figure 6 shows that the asset manager (for a fund) buys the structured product directly from the issuer. This results in hedging transactions by the issuer, e.g. by buying the underlying asset of the structured product.

12 See ISDA (2023). *Transparency in CDS*, available at: <https://www.isda.org/2023/03/30/transparency-in-cds/>. For example, the European Market Infrastructure Regulation EMIR requires parties to clear OTC derivatives with a central counterparty.

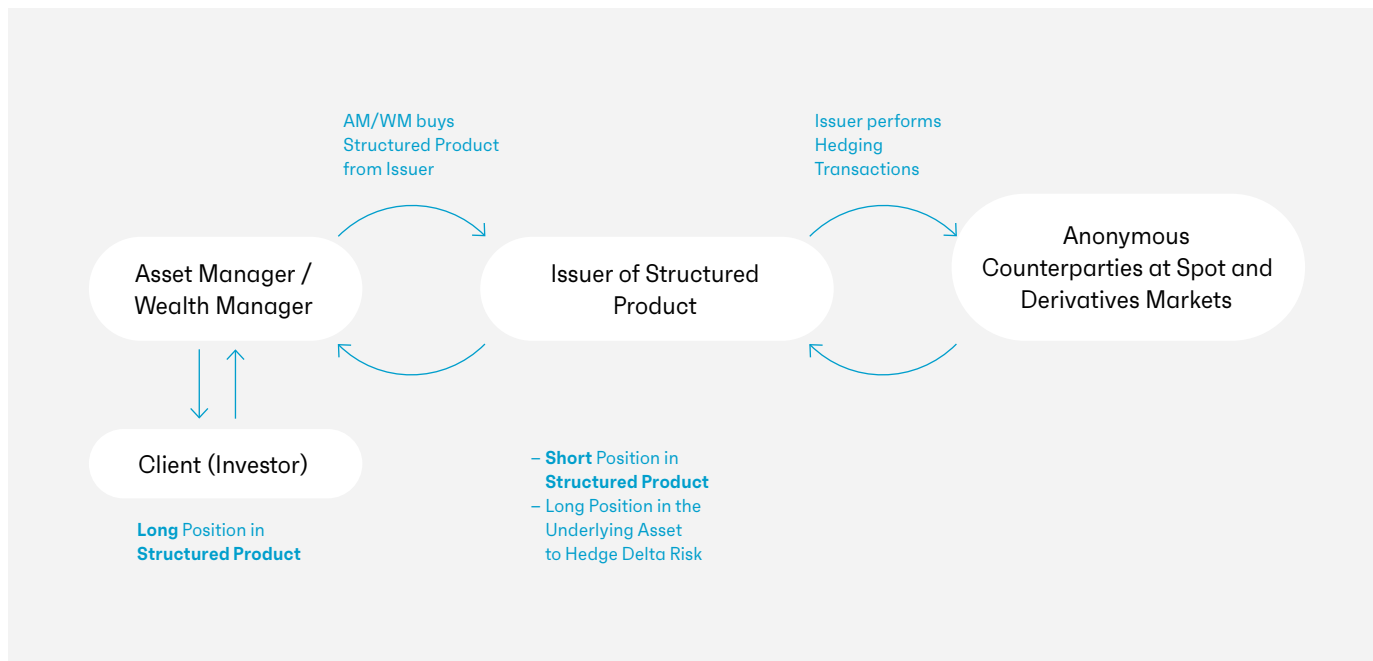


Figure 6: Parties involved in transactions of structured products

Related Challenges

Market Signal and Exposure

By buying a structured product, the client of the asset manager gains exposure to both risk and return for the underlying assets. The issuer of the structured product typically is setting up the hedge against the position in the structured product. Thus, buying a structured product leads to an indirect market signal executed by the issuer. In general, we can assume that issuers hedge the delta risk of sold structured products, as they would otherwise violate their value-at-risk limits.

From a sustainable investor's perspective the use of a structured product linked to a single underlying can be appropriately managed to meet the defined sustainability criteria of the client and therefore does not pose specific challenges from a market signal and exposure perspective.

Ownership Rights

Structured products often have complex setups, with multiple parties involved in their manufacturing and management. For investors, it can be a challenge to exert their influence on the underlying assets through stewardship activities such as voting or engaging with issuers and companies to drive positive

change. The counterparty usually either hedges with the physical position or nets their risk positions with a synthetic construction. In the case of a physical hedge, the ownership rights belong to the counterparty, which means that stewardship policies can only be exercised by the counterparty. Different to listed derivatives such as futures, this counterparty is known to the asset manager.

Transparency

As outlined in the beginning, a structured product consists of different traditional assets and derivative components. To meet transparency requirements, the delta-adjusted exposure of the structured product with respect to each underlying asset can be reported transparently.

Compared to futures, the issuer of the product is known and the asset manager can be transparent about the included underlyings and the issuer of the structured product. Hence, providing adequate transparency through ESG metrics or ratings of both is possible.

4 SSF Guidance

The use of derivatives in a fund or mandate can be essential to achieving the financial objectives of clients. Asset managers must be able to use these instruments to hedge against risk, to efficiently implement investment objectives and to maintain liquidity. However, managers must ensure they meet the criteria defined for sustainable products to the greatest extent possible. The previous chapter described the different client-relevant challenges that can occur when using derivatives in the context of sustainable products. This chapter lists possible ways to address these challenges.¹³

4.1 Market Signal and Exposure

Asset managers of sustainable funds and mandates should aim to align with the sustainability objectives of the clients. It is therefore important to define standards and set thresholds for the use of derivatives and the related exposure.

4.1.1 Threshold for Index Futures (Stocks or Bonds)

Derivatives play an important role in reducing and transferring financial risk. Index futures give the investor exposure to a basket of underlying assets. When using index futures, the asset manager must ensure that a reasonable proportion of the portfolio is in line with the defined sustainability objectives (e.g. a climate-alignment of the portfolio assets). For this purpose, the asset manager should set a threshold for the maximum proportion of the portfolio invested in index derivatives not being fully aligned with the sustainability objectives of the clients. To ensure that higher short-term exposures to indices, e.g. due to high short-term liquidity that needs to be invested temporarily, do not lead to a violation, the exposure should be calculated as a time-weighted average.¹⁴ Asset managers should communicate this threshold to clients.

4.1.2 Use of Index Futures based on ESG Indices

From a practical point of view, it is difficult to fully align a portfolio with the defined sustainability criteria when using index derivatives (e.g. zero tolerance with exclusions). One way to meet the client's sustainability objectives is to use specific

instruments based on ESG indices. For such indices, a broad market index can be screened on the basis of ESG ratings or exclusion criteria, and the ESG index is constructed to meet defined sustainability objectives. In line with traditional indices, they offer an efficient way to gain exposure to the index constituents, while at the same time relying on specific sustainability approaches.¹⁵

4.1.3 Neutral Investment Category for FX Futures and CDSs

For certain derivative instruments, a clear effect of their use on the client's sustainability objectives cannot be determined. Furthermore, it is not possible to appoint an ESG metric clearly linked to their exposure. Therefore, FX futures, single-name and index CDSs should be considered a neutral investment category, i.e. as investments not classified as sustainable or non-sustainable. However, managers should fully inform their clients about the exposure to these instruments.

4.2 Ownership Rights

Asset managers of sustainable funds and mandates should consider structured products from issuers which have a high sustainability performance and a stewardship policy in place.

4.2.1 Stewardship Policy

In the case of structured products, it is assumed that the issuer of the structured product takes a physical hedge position, and therefore obtains ownership rights. Consequently, the asset manager can actively choose a product from an issuer that acts in line with the client's sustainability objectives and has a stewardship policy in place to promote sustainable corporate practices.

In the case of listed derivatives, such as futures based on stocks and bonds, the asset manager gains positive or negative exposure to the underlying assets, but legal ownership remains with a unknown counterparty. In the case of OTC traded derivatives, where the counterparty is known, the asset manager could choose and engage with counterparties to execute engagements and/or voting rights on physical hedge positions.

¹³ Table 1 in the Executive Summary summarises the challenges and guidance outlined in this section.

¹⁴ A possible way to calculate the individual product threshold is the ratio of the total net exposure (i.e. the sum of the net exposure of long and short positions of the same underlying) to the total investment portfolio.

¹⁵ Although they do not fully cover individual sustainable investing strategies and are usually less liquid than traditional index products, ESG index derivatives can be used as an approximation to match an investor's profile and overcome the disadvantages of traditional indices with respect to ESG considerations.

4.3 Transparency

Asset managers of sustainable funds and mandates should aim to provide clients with maximum transparency on ESG metrics regarding the use of derivatives in their portfolios. In doing so, the asset manager has different ways to aggregate the ESG metrics of the traditional assets and derivatives.

4.3.1 ESG Metrics of Underlying Assets

For index, single stock or bond futures or structured products, the gained exposure can be compared to buying or selling short the underlying asset(s). ESG ratings or ESG metrics (e.g. carbon intensity) linked to the underlying asset(s), can be calculated based on a delta-adjusted market value of the underlying(s).¹⁶ Asset managers should integrate the exposure to ESG metrics into the sustainability reporting of the portfolio.

4.3.2 ESG Metrics of Issuers of Structured Products

Structured products are issued as bearer bonds and the proceeds of a structured product are in principle used for general purposes (including hedging) at the issuer level.¹⁷ Therefore, the asset manager should provide transparency not only on the underlying asset but also on the ESG metrics of the issuer of the structured product. As outlined above, the asset manager can choose an issuer that meets defined sustainability objectives and has a stewardship policy in place.

4.3.3 Netting ESG Metrics of Derivatives and Traditional Assets

Asset managers can use long and short derivatives to manage risk and liquidity. Consequently, if asset managers report on the ESG metrics of funds or mandates, they should take the ESG metrics of the underlying assets of the derivatives into account in order to provide full transparency. These ESG metrics can be treated in the same way as those of traditional assets (e.g. stocks and bonds) and therefore be aggregated on a portfolio level. There are ongoing discussions among associations, market participants and regulators on how to aggregate and report on ESG metrics of funds that contain derivatives and traditional assets.¹⁸ In the following, four ways of generally considering the ESG metrics of derivatives are presented:

Transparency on Netted Exposures

The first option is to provide transparency on total net exposures of all traditional assets and underlyings of the derivatives on a portfolio level. The process requires aggregation and consolidation of the ESG metrics of traditional assets with those of the derivatives with the same underlying assets. Reporting covers the sum of the ESG metrics of net positive and net negative positions.

Netting at the level of the underlying asset (e.g. a stock of an entity and underlying of a derivative) provides maximum transparency on the net ESG performance of the portfolio. In the case of equal long and short positions in the same underlying, the netted exposure is zero. On the downside, the netting approach might be difficult for some ESG metrics and could mislead the client into thinking the portfolio is in line with defined sustainability objectives, although it may contain companies that are not aligned. In the case of carbon emissions, the resulting net exposure of zero can be misleading, because the real-world emissions linked to the long position cannot simply be eliminated by attributed emissions linked to short positions.¹⁹

¹⁶ For futures, delta is assumed to be one, which is similar to buying the underlying asset.

¹⁷ Note that an issuer may also earmark the proceeds for a portfolio of assets with sustainability characteristics on the asset side of the bank's balance sheet. This functional link is in principle the same as for green bonds (e.g. in accordance with the ICMA Green Bond Principles). See also Case Study 6.1.

¹⁸ See also the discussion paper by MSCI (2022). *ESG Reporting in Long-Short Portfolios*, available at: <https://www.msci.com/documents/10199/0b4886b5-9a86-a919-47af-1c54632df46f>.

¹⁹ The use of a netting approach could be appropriate for the calculation of financed emissions attributed to a specific investor if all investors used this method. The financed emissions of all investors would then correspond to the real-world emissions. For a discussion of the difference between financed and real emissions, see Seiz et al. (2023). *Avoiding greenwashing in investment portfolios through consistent emissions classification and transparent reporting of derivatives*, available at: https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID4444276_code5884130.pdf?abstractid=4444276&mirid=1.

Transparency on Gross Long Exposure only

The second option is to provide transparency only on the gross long exposure of traditional assets and underlyings of the derivatives. Gross long exposure represents the sum of the ESG metrics of all long positions in traditional assets and corresponding derivative underlyings, without deducting ESG metrics of short positions. Reporting covers ESG metrics for gross long positions only.

Reporting only on the gross long positions provides the client with information on positive exposures to companies. This helps clients to identify exposure to companies which do not meet the defined sustainability objectives. Furthermore, it highlights opportunities to implement a stewardship policy through the long side of the portfolio. On the downside, this approach could overstate or understate the ESG performance of the portfolio, as the ESG metrics of the short positions are not captured in the reporting.

Transparency on Long and Short Exposures separately

The third option is to provide transparency separately on the long and short exposures of all traditional assets and underlyings of derivatives. This involves aggregating the ESG metrics of all long positions on the one hand and of all short positions on the other hand. Reporting includes separate ESG metrics for the aggregated long and short positions of the portfolio.

Reporting on both sides of exposures helps the client understand all links to companies invested in. The ESG performance of the portfolio is fully disclosed, leaving the client with information on the achievement of sustainability objectives for both sides of investments. On the downside, it significantly increases the complexity of the reporting on behalf of the asset manager and the client cannot compare the funds easily because an aggregate ESG performance for the fund cannot be calculated.

Transparency on Net-positive Exposures only

The fourth option is to provide transparency on net positive exposure of traditional assets and underlyings of the derivatives. Net positive exposures are calculated by consolidating long and short positions in the same underlying assets. Reporting only includes ESG metrics on net positive exposures, while not reporting the ESG metrics of net negative exposures.²⁰

Omitting net negative exposure could mislead the client, as the achievement of sustainability objectives cannot be fully assessed. Long exposures with possible links to controversial companies and opportunities for stewardship policies could be missed. Overall, this approach could overstate or understate the ESG performance of the portfolio as the ESG metrics of the long and short positions are only partially captured in the reporting.

20 See also CESR (2010). *CESR's Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS*, available at: https://www.esma.europa.eu/sites/default/files/library/2015/11/10_788.pdf.

5 Conclusion

Derivatives are an important tool for portfolio construction and are being used in sustainable funds and mandates. While certain derivatives linked to foreign exchange and credit default swaps do not provide a link to clients' sustainability objectives and cannot be assessed with a comprehensive ESG rating, asset and wealth managers can address sustainability-related challenges of other derivatives to improve transparency and meet clients' expectations.

This report sets out three main areas of practical guidance. First, it highlights the need for a time-weighted threshold for index derivatives to avoid unintended interference with clients' sustainability objectives. Furthermore, the use of index futures based on ESG indices helps to align products to these objectives. It also highlights the need for a neutral investment category for instruments such as FX Futures and CDSs that are relevant for risk and liquidity management but have limited effect on sustainability objectives.

Second, it shows that for structured products, choosing an issuer with an established stewardship policy provides the asset manager with the opportunity to pursue an engagement strategy and, hence have an indirect influence on the exercise of voting rights.

Third, the asset manager should provide a maximum of transparency to the client and, where possible, use the ESG metrics for derivatives on a delta-adjusted basis of the underlyings as well as ESG metrics for the issuer of structured products. The transparency of positions can be provided in different ways: based on netted positions, based on gross long positions only, based on long and short positions separately and based on net positive positions only.

While addressing the described challenges linked to market signal and exposure, ownership rights and transparency, asset managers have to consider the different sustainability objectives of clients. Although not all of the practical guidance described above has a direct economic effect, some of it has the potential to contribute to investor impact.

6 Case Studies: Use of Derivatives in Sustainable Investment Products

6.1 Case Study: Equity Index Futures

General Overview

Organisation	UBS Global Wealth Management
Type of product	The equity index future is used in a sustainable structured product within a discretionary/advisory mandate for private clients.
Asset allocation	Multi-asset portfolio
Applied sustainability approaches	ESG criteria considered in the selection of the underlying securities, e.g. selecting ESG leader stocks; specific ESG criteria considered in the selection of the issuer of the structured products.
Type of derivative used in product	Listed index future contract

In general, what are the main motivations for applying sustainability / ESG criteria in your investment product?

In our view, sustainable investing is not a separate asset class, but a strategy that can be applied across asset classes and ultimately results in optimised sustainable portfolios that deliver comparable risk-adjusted financial returns to conventional portfolios. This implies that sustainability-focused investors need to have access to an extensive toolkit and a set of credible sustainable investing strategies across asset classes to be able to build these diversified portfolios and ultimately navigate through volatility and changing market environments.

What are the main objectives of using derivatives in your sustainability-related product?

Derivatives can be a relevant tool within a sustainable investing strategy, in the same way as they are used in conventional investments. Thanks to their unique characteristics and flexibility, they can help investors achieve specific investment targets in a more efficient and direct way compared to traditional instruments. An equity index future allows for a quick and efficient adjustment of equity exposure without the need to exchange securities and cash, ultimately reducing implementation times or avoiding trading less-liquid components in a portfolio.

In the sustainable portfolio, where available, ESG criteria will be considered in the selection of the underlying security. Given the limited availability and, most importantly, liquidity of derivatives on ESG securities²¹, the derivative investment can target underlying securities without a specific ESG profile, but covers broad markets, asset classes or risk exposures.

What do you see as the main challenges related to the use of the derivatives in the product described in your case study?

Index futures typically do not lead to a direct purchase and ownership of the underlying asset(s). As a consequence, such investments may indeed result in a missed opportunity to facilitate environmental or social investor impact that could otherwise be achieved through, for example, stewardship and corporate engagement.

Last but not least, derivatives can be perceived to be very technical and not as easy to grasp and understand by private investors. As a consequence, investors should consider what they are seeking to achieve with these instruments, both from a financial and a sustainability perspective.

What measures have you implemented / are you planning to implement to address these challenges?

The SI profile of derivatives²² in our portfolio is assessed against a set of five key criteria – i.e., (i) underlying assets and (ii) structure, (iii) issuer, (iv) use of proceeds, and (v) intent – in order to determine the potential to drive sustainability objectives alongside financial returns. For index futures, the following two criteria are mainly considered:

21 ESG securities are defined as equities and bonds of issuers with strong performance on certain key ESG characteristics (e.g. with high ESG ratings or with high revenue share of sustainable products and services).

22 These five key criteria are also applied for structured products.

I. **Underlying assets:** The instruments are linked to a group of assets (e.g. an index or a basket of stocks), offering returns based on the performance of the underlyings. Sustainable investors may want to select instruments where the underlying assets are sustainability-focused (e.g. ESG leaders or ESG improvers strategies, sustainable thematic indexes or stock baskets, etc.).

II. **Structure:** Despite the lack of direct ownership, trading a derivative typically generates hedge trades in the underlying security. In this way, investors can indirectly induce a buying activity in the underlying assets by investing in a derivative.

The other criteria are more relevant if the derivative is packaged in a structured solution such as a funded certificate:

III. **Issuer:** Market participants can issue a certificate with sustainability characteristics, and they will ultimately receive the benefits of additional capital through fees. Sustainable investors may want to look for issuers that are themselves ESG leaders, or are multilateral development banks (MDBs).

IV. **Use of proceeds:** Like with other debt instruments, the issuer can either direct the proceeds of the issuance to general use or can earmark it for environmental, social or sustainable projects, similar to green, social and sustainable bonds. Similarly, products issued by MDBs would have proceeds directed to financing sustainable development projects around the world.

V. **Intent:** Just like other asset classes and instruments, certificates or structured products may be designed with an explicit sustainability objective (for example, to signal preference for ESG themes versus other investments, or for ESG leaders versus laggards), or may simply seek to integrate ESG information as part of the structure. In the latter case, the investment will be aligned to sustainability considerations but not necessarily intentionally driven by sustainability objectives. Sustainable investors should look for the expression of intent in relevant prospectuses or formal filings.

Do you include derivatives in the SI reporting of this product? If yes, what related challenges do you face and how do you deal with them?

Reporting for such a product is typically aligned with the ESG reporting for conventional strategies, i.e. calculating relevant ESG metrics (e.g. ESG scores) for underlying securities. Reporting on the ESG characteristics of the underlying assets supports ongoing transparency and monitoring. This includes sustainability scores and ratings, as well as monitoring of controversial business activities and incidents for the underlying securities.²³

At the same time, such reporting provides transparency only, and should not be interpreted in any way as a link to the intent to address sustainability objectives.

In general, do you see the potential for derivatives to have a positive impact on the real economy?

In our view, the potential of index futures to drive incremental positive impact on the real economy is fairly limited, given the mostly synthetic nature of such products, which foregoes opportunities for active ownership and ongoing stewardship.

However, the use of derivatives and debt instruments within a structured product offers, in our view, the opportunity to include sustainable investing considerations in the retail market of structured products. Sustainable structured products where the bond is used to finance sustainability-related projects and where the underlying assets of the derivatives have a strong ESG profile can indeed combine the need to address sustainability objectives with the high flexibility of structured solutions.

Beyond stand-alone use, we see the role of derivatives and structured products as a diversifier in broader sustainable portfolios as quite key. Derivatives and structured solutions help extend the investment toolkit for sustainable portfolios. In turn, we expect this will increase the level of confidence that investors have in sustainable portfolios and help the continued flow of capital towards sustainable investments more broadly.

²³ In cases where the derivative is accessed through a structured solution, reporting should also be provided for the issuer of the structured solution. This includes sustainability scores and ratings, as well as monitoring of controversial business activities and incidents for the issuer of the solution.

6.2 Case Study: Credit Default Swaps (CDSs) in Sustainable Fixed-Income Products

General Overview

Organisation	Credit Suisse Asset Management (Switzerland) AG
Type of product	Fixed-income product that aims to combine the best ideas from the full spectrum of global fixed-income markets with a dynamic asset allocation framework to offer a high level of income and capital growth. By taking long and short positions related to credit strategy, market allocation, issuer and security selection, duration and yield curve, the strategy aims at unlocking return sources that are inaccessible for long-only investors.
Asset allocation	100% fixed income
Applied sustainability approaches	Exclusion criteria as defined in the Credit Suisse Sustainable Investment Framework (norms-based, values-based and business conduct exclusions), ESG factors that are integrated into the credit investment process, and corporate issuers are subject to potential engagement (individual engagement, thematic engagement, collaborative engagement).
Type of derivative used in product	Credit default swaps (CDSs)

In general, what are the main motivations for applying sustainability criteria in your investment process?

In September 2019, Credit Suisse Asset Management announced its plan to increasingly incorporate environmental, social and governance considerations – ESG factors – into the investment process of several of our strategies. Following this announcement, we have made substantial efforts to integrate sustainability into our investing process and implement it across many of our core asset classes. We take a systematic approach to sustainable investing. This means that ESG factors are taken into account at various stages throughout the credit investment process. Our sustainable investing strategies apply ESG criteria when defining the investment universe (e.g. through ESG exclusions) and when integrating ESG factors directly into the investment process. Our main motivation is to gain a better understanding of inherent E, S and G risks associated with a company. We therefore extend traditional research views to encompass sustainability considerations, and reflect on ESG factors when selecting and defining exposure to securities.

What are the main objectives of using derivatives in your sustainability-related products?

The two main purposes for using CDSs are building up synthetic exposure to specific issuers and hedging. First, investors may want to build up synthetic exposure to specific issuers if cash bonds²⁴ from the same issuer are relatively illiquid or if the risk premium reflected by the CDS spread is relatively more attractive. Second, in some cases portfolio managers may prefer not to sell a cash bond out of the portfolio, but instead to buy protection through a CDS to neutralise credit risk. Hence, the use of derivatives in sustainable portfolios is not significantly different from the use of derivatives in traditional portfolios.

What do you see as the main challenges related to the use of the derivatives in the product described in your case study?

Credit Suisse Asset Management has defined clear rules for all products that are labelled and distributed as sustainable products. These rules refer to the definition of ESG exclusion criteria and the integration of ESG factors into the investment process. Exclusion criteria refer to industries or individual companies, to which sustainable products are not allowed to build up exposure. The main challenge is to avoid synthetic exposure through derivatives to these companies and/or industries.

Another challenge is the loss of ownership. With respect to our engagement activities, this can be translated into less impact on the behaviour of investee companies.

24 This includes bonds with fixed and variable interest rates.

What measures have you implemented / are you planning to implement to address these challenges?

As a consequence, on the fixed-income side, we have defined our exclusion rules not only for cash bonds but have extended them to derivatives as well. We are transparent about these rules, which are publicly available.

When applying the Credit Suisse Asset Management's (CS AM) Sustainable Investing Policy, CS AM may use financial derivative instruments to implement the investment strategy of a product. In such cases, the principles of the Sustainable Investing Policy are applied in the same way to derivatives as to direct investments except for Active Ownership, which cannot be exercised. This means that Credit Suisse Asset Management's ESG Exclusions are applied at the level of the underlying instruments whenever possible (with the exceptions mentioned below) and that the selection of derivatives follows the same principles of ESG Integration as those defined for direct investments.

Exceptions to Credit Suisse Asset Management's ESG Exclusions for derivatives encompass:

- Short positions in single stocks, single-stock options, and buying protection in a single-name CDS are not allowed in companies subject to Norms-based Exclusions.
- Short positions in single stocks, single-stock options, and buying protection in a single-name CDS are allowed in companies subject to Values-based Exclusions and/or Business-conduct Exclusions.
- Curve trades on companies that fall within the Values-based Exclusions and/or Business-conduct Exclusions are only allowed if the notional value of the credit short position equals the notional value of the credit long position.

Do you include derivatives in the SI reporting of this product? If yes, what related challenges do you face and how do you deal with them?

Yes, the derivatives exposure is also included in the SI reporting (by splitting the derivatives into its two legs: long and short). In line with the methodology from MSCI ESG, only the

long leg is considered in the reported numbers. This attributes the economic exposure of the derivatives position to the investor. Short positions cannot reduce this economic exposure.

In general, do you see the potential for derivatives to have a positive impact on the real economy?

The impact of derivatives on the real economy is limited. While companies rarely know which investors have bought or sold protection through a single-name CDS, they might become aware if the basis (spread between CDS and corresponding cash bond with a similar maturity) widens significantly – as this could have a (negative) impact on bonds spreads. Most companies still tend to focus on the widening or tightening of their (cash) bond spreads.

Imprint

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