

2024

Guide to the
LPX Listed Private Credit Index Series



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LPX AG

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The Guide sets out the ground rules for the construction and maintenance of the LPX Listed Private Credit Index Series.

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1 General Index Information

The design of the LPX Listed Private Credit Index Series, hereafter “LPX Index” or “LPX Indices”, is based on a proprietary industry classification scheme, which ensures the representative composition of the LPX Indices focusing on a universe of global listed companies, which primarily provide debt and mezzanine capital to mainly private middle market companies. Eligible constituent selection is based on individual company research, which ensures a look-through on the investment portfolio level. From this background, the LPX Indices are suitable for mapping the risk and return characteristics of the direct lending asset class.

A key challenge in direct lending is that there is no standard industry classification scheme available that ensures for the consistent identification of a global universe of listed direct lending companies. In the field of indexing, a reliable industry classification scheme is crucial to the design of representative performance benchmarks. The industry classification scheme developed by LPX AG enables the identification and classification of a global set of direct lending companies that provide debt and/or mezzanine capital to private middle market companies.

The LPX Indices contribute to the investment process by serving as a relevant and representative performance benchmark and as an effective research tool. The design, development and delivery of the LPX Indices ensure that they are investable, tradable and transparent.

LPX AG reserves the right to deviate from the rules set forth in this Index Guide in case the properties of the base universe impede to follow the stipulated index construction rules. In such a case all relevant stakeholders will be informed and changes to the index construction methodology will be communicated on the LPX AG corporate website at the earliest possible date.

1.1 LPX Listed Private Credit Index Series

The LPX Listed Private Credit Index Series is a benchmark for the direct lending asset class. The design and selection methodology of the LPX Indices, which includes the definition of the base universe and selection of eligible index constituents, follows the rules as described in Section 2.

LPX Listed Private Credit Index

The LPX Listed Private Credit Index is designed to represent the 25 most highly capitalized direct lending companies. The LPX Index offers exposure to a broad diversified private debt portfolio in mainly middle market companies. The LPX Index is available with the reference currency AUD. The index is available as a Total Return (Net) AUD Hedged version. The index is calculated in real-time and distributed to a broad array of data vendors.

1.2 Reference Date, Weighting and Cap

The reference date is chosen such that a minimum of 10 initial constituents are ensured. The LPX Indices are calculated according to the calculation algorithm as set forth in Section 3. In order to limit the weight of individual constituents in the indices, a cap (the variable is defined as “CAP” in this Guide) is set for the market capitalization of any single constituent of the index (see Section 3 for details).

For the ordinary chaining dates as depicted in Table 1, the following rule applies: For the calendar months Jan and July, the chaining date takes place on the SECOND THURSDAY of the respective month. In case the chaining date falls on a bank holiday the chaining date is preponed T-1. Generally, the share fixing takes place in T-5, where T refers to the chaining date. The effective date of the chaining is by definition T+1. The index changes (i.e., index mutations) are communicated on the LPX AG corporate website at the earliest possible date.

Table 1: Characteristics of the LPX Listed Private Credit Index Series

Index	Fixed Number of Constituents	Reference date	Launch date	CAP	Chaining dates ^a
LPX Listed Private Credit AUD Hedged	25	31.12.2008	02.01.2024	7.5%	Jan, July

1.3 Prices

Official closing prices from the primary stock exchanges of the respective index constituent securities are used for the calculation of the LPX Indices. In the case that the official closing price of a constituent instrument is not available (i.e., suspension, illiquidity, bank holiday, etc.), the previous official closing price is used for the specific instrument for index calculation. In the event of a suspension during trading hours, the last price determined before such a suspension is used for subsequent calculations. If such suspension occurs before the start of trading, the closing price of the previous day is used. In the event of an exchange holiday, the closing prices from the previous day are used. LPX AG publishes the indices for every day except for Saturdays and Sundays. There are generally no index holidays.

1.4 Calculation Frequency

Generally, official closing index values are calculated and disseminated via appropriate channels. Furthermore, the LPX Indices are calculated in real-time during official trading hours and disseminated to a broad array of data vendors. For details on the underlying data provider mnemonics refer to Section 5.

1.5 Country Allocation

The LPX base universe includes companies that are traded on regulated exchanges worldwide. The base universe is continuously reviewed and new eligible companies are added in accordance to Section 2.2. The constituents of the LPX base universe are traded on the stock exchanges as outlined in Table 2.²

Table 2: LPX Base Universe - Global Stock Exchanges

Country	Exchange Name	MIC ^a
Australia	Australian Stock Exchange (ASE)	XASX
Belgium/Luxembourg	EN Brussels	XBRU
Brazil	Sao Paulo Stock Exchange (BOVESPA)	BVMF
Canada	Toronto Stock Exchange (TSX)	XTSE
Chile	Santiago Stock Exchange	XSGO
China	HKEx (Hong Kong Stock Exchange)	XHKG
France	NYSE Euronext	XPAR
Germany	Deutsche Börse XETRA	XETR
Greece	Athens Exchange SE	XATH
Hong Kong	HKEx (Hong Kong Exchanges and Clearing)	XHKG
Indonesia	Indonesia Stock Exchange (IDX)	XIDX
Italy	Borsa Italiana SpA	MTAA
Japan	Tokyo Stock Exchange (TSE)	XTKS
Malaysia	Bursa Malaysia	XKLS
Mexico	Bolsa Mexicana De Valores (BMV)	XMEX
New Zealand	NZX (New Zealand Stock Exchange)	XNZE
Philippines	Philippine Stock Exchange (PSE)	XPHS
Singapore	Singapore Stock Exchange (SGX)	XLON
Spain	Soc.Bol SIBE	XMCE
Switzerland	SWX Swiss Exchange	XSWX
Switzerland	Virt-X Exchange	XVTX
Thailand	The Stock Exchange of Thailand (SET)	XBKK
Turkey	Istanbul Stock Exchange	XIST
United Kingdom	London Stock Exchange (LSE)	XLON
United States	NYSE (New York Stock Exchange)	XNYS
United States	NASDAQ National Market System	XNGS
United States	NASDAQ National Market System	XNMS

^a refers to Market Identification Code ISO 10383 (MIC).

²LPX AG reserves the right to add further exchanges to the list above.

1.6 Currency Conversion

The foreign exchange rates used in the calculation of the LPX Indices are 04:00 p.m. London time rates provided by WM/Refinitiv (the “WM/Refinitiv Rate”). If there is no 04:00 p.m. London time WM/Refinitiv Rate for the relevant calculation day, the last available 04:00 p.m. London time WM/Refinitiv Rate will be used for the closing level calculation.

1.7 Error Correction Policy

The objective is to maintain the LPX Indices to the highest standards of accuracy and integrity, using reliable data sources and following best practice in statistical and operational procedures. Where material errors occur in data or in calculation procedures, these are corrected promptly (i.e., within one business day). However, LPX AG is conscious of the risk of damaging the confidence of users through the frequent publication of amendments where trivial statistical errors have occurred that do not materially affect the accuracy of the published index series.

2 Choice of Index Constituents

2.1 Preamble

A key challenge in direct lending is that there is no standard industry classification scheme available that ensures for the consistent identification of a global universe of listed direct lending companies. Moreover, Listed Debt is a niche market when compared to the overall listed security market. In order to identify a representative universe of listed debt companies/funds, the following admission criteria are defined:

- Provision of debt capital as defined under Section 2.2.
- At least 50% of total assets must fall under the defined debt categories as depicted in Table 3.
- Listed on an eligible stock exchange as defined in Table 2.

Due to the stock exchange listing, the companies/funds are subject to transparency requirements, which provide information about the investment strategy as well as the composition of the debt portfolio. The types of debt, which are eligible are defined in Table 3. In order to determine the degree of diversification, information regarding the geographical and sectoral distribution of the debt portfolio is also evaluated. Only publicly available information is used as officially published by the companies.

Table 3: Types of Debt Instruments

The table outlines the different types of debt and/or mezzanine capital.

Type	Definition
Senior Debt	Senior Debt refers to financing through senior loans that may be secured or unsecured.
Junior Debt	Junior Debt are financial instruments that rank lower than other claims against the debtor company in the case of insolvency. These can also be secured or unsecured.
Mezzanine	Mezzanine is a hybrid of debt and equity. It is often used subordinately to bank financing. The total return results from the current interest and an additional participation in the equity of the company.
Convertible Debt	Convertible Debt gives the holder the right to convert a bond into shares during a conversion period at a predefined ratio; otherwise, the bond matures at maturity.

2.2 Methodology

The base universe for the construction of the LPX Listed Private Credit Index Series is a subset of the global equity universe. Based on a multi-step research approach, a global set of eligible constituents are identified and classified using a standard classification scheme.

1. Identification of listed companies, which provide debt and/or mezzanine capital to private middle market companies. These companies form the LPX raw universe.
2. Screening of the raw universe on a single constituent basis. Look through on investment portfolio level and standardized classification of the underlying debt investments.
3. Analysis of the underlying investment portfolio in order to measure percentage share of debt and/or mezzanine capital. A company is considered as a listed direct lending company if at least 50% of the investment portfolio is allocated in debt and/or mezzanine capital including cash and cash equivalents. A classification of the different types of debt and/or mezzanine is depicted in Table 3.

Within the framework of a continuous research process, the index administrator regularly checks whether a company currently in the base universe is still an eligible constituent or whether new companies that have previously not been considered should be included.

2.3 Liquidity Analysis (LA)

The LPX Indices are adjusted for liquidity where liquidity is defined as how often and in what volume an instrument is traded on the underlying primary stock exchange. The rationale behind the liquidity analysis is to ensure that the LPX Indices are representative and replicable. For the liquidity analysis annual averages are used for every potential LPX Index member³. Specifically, the following ratios are calculated within the framework of the liquidity analysis:

Ratios

The specific liquidity ratios are:

- a maximum average bid-ask spread (BAS)
- an average minimum market capitalization [mEUR] (MV)
- an average minimum trading volume per trading day measured relative to the market capitalization (TV)
- a minimum trade continuity (CT)

Criteria

The following table summarizes the criteria that are applied to each of the LPX Indices. In the event that a company does not fulfill one of the criteria, the company is not eligible for inclusion in the respective index, which means that the criteria are so-called "KO criteria".

Table 4: Ratios of Liquidity Analysis

Index Name	BAS ^a	MV ^a	TV ^a	CT ^a	Ranking
LPX Listed Private Credit AUD Hedged	1.0%	mEUR 250	0.07%	95%	MV

^a LPX AG reserves the right to deviate from the liquidity thresholds as depicted in Table 4, in case of minor violations in order to minimize fluctuations in the index. LPX AG reserves the right to consult stakeholders regarding the current liquidity of index constituent securities.

Ranking

Generally, the LPX Indices are ranked according to the market capitalization of the underlying constituents. Specifically, the companies that fulfil the liquidity criteria as outlined in Table 4 are brought into a ranking list according to their market capitalization (at the time of the liquidity analysis).

Time and Frequency of the Liquidity Analysis

The liquidity analysis is carried out twice a year on the first trading day in December and June and serves as a basis for the composition of the LPX Indices.

³The use of annual averages implies that a minimum trading history of one year is a prerequisite for an instrument to become a potential eligible member of a LPX Index.

Ordinary Adjustment

An ordinary adjustment of the LPX Indices takes place according to the predefined chaining dates for the LPX Indices as outlined in Table 1 on a half-yearly (quarterly) basis based on closing prices of the respective chaining date. The effective date of the new composition is, by definition, one trading day after the chaining date. Companies that no longer fulfil one of the “KO criteria” as outlined in Table 4 are replaced. In such a case, the successor is the company with the highest rank better than “ n ”⁴ that was not previously included in the index, where “ n ” indicates the number of companies in the respective index.

Table 5: Ranking-Supported Adjustments

Index	R1	R2	R3
LPX Listed Private Credit	$[n \times 1.2]$	n	$[\frac{n}{2}]$
AUD Hedged			

A constituent of the index that is ranked in the respective ranking list at R1 or worse is replaced, assuming a constituent exists, which is ranked at R2 or better in the ranking list. A non-index-constituent that is ranked at R3 or better in the respective ranking list is included in the index, if a company currently in the index has a lower rank than R2.

At the end of the process of ordinary adjustments, there is a new constituent list for the respective index. At the same time, a new ranking list of possible successors is created. These ranking lists are created using the methodology as outlined in Table 4, i.e., those companies (not currently in the index) with the highest market capitalization get the top rank and are therefore the first candidates to advance in case of an ordinary adjustment.

Extraordinary Adjustment

Adjustments due to extraordinary events will also be carried out. LPX AG reserves the right to deviate from the said rules for ordinary or extraordinary adjustment in exceptional cases. The adjustments applied will be communicated in advance via appropriate channels.

Constituent Replacement due to a Delisting

Constituents that have applied for a de-listing at an exchange or for whom bankruptcy proceedings have been adjudicated will be excluded from the index effective not later than the day when the security is last traded at an exchange. In case the security is removed before that date, LPX AG will communicate the change in index composition in advance via appropriate channels. The company with the highest rank of the successor list will succeed in the index as outlined in Section 2.3.

Merger of Two Index Constituents

If an existing index constituent is acquired for eligible shares (or a combination of eligible shares and cash) by another index constituent, the existing constituent is deleted (not later than) on the effective date of acquisition. The company with the highest rank of the successor list will succeed in the index as outlined in Section 2.3.

⁴ $[x]$ denotes the largest integer smaller than x .

Merger of an Index Constituent with a Non-Index Constituent

If an existing index constituent is acquired for eligible shares (or a combination of eligible shares and cash) by a quoted non-constituent, the merged company is continued in the index if eligible in all other respects of this Guide. If the requirements defined in Section 2.2 are not fulfilled, the merged company is replaced by the company with the highest rank of the successor list.

Spin-off

If an existing index constituent spins off a company, the spun-off company enters the index for a period of minimum 5 trading days. After that period the company will be removed from the index or, in case all criteria are met, will remain in the index.

3 Calculation Methods (Hedged)

3.1 Introduction

This section sets forth the groundrules with regard to the calculation of the LPX Listed Private Credit AUD Hedged Index (“Index”), which is owned and administrated by LPX AG, Zurich (“Index Administrator”). The index administrator has engaged Solactive AG (“Index Calculation Agent”) as the calculation and publication agent. The Index is calculated and published for the index administrator by the Index Calculation Agent.

This section and the policies and methodology documents referenced herein contain the underlying principles and rules regarding the structure and operation of the LPX Listed Private Credit AUD Hedged Index. Neither the Index Administrator nor the Index Calculation Agent offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the level of the Index at any certain point in time nor in any other respect.

The Index Calculation Agent strives to the best of its ability to ensure the correctness of the calculation but accepts no liability from the wilful negligence, fraud or default of any person in connection with the calculation and publication of the Index. The Index Calculation Agent does not make any warranties, express or implied, to the Index Administrator, any of its customers, or anyone else regarding the Index, including, without limitation, any warranties with respect to the timeliness, sequence, accuracy, completeness, correctness, merchantability, quality or fitness for a particular purpose or any warranties as to the results to be in connection with the use of the Index. There is no obligation for the Index Administrator or the Index Calculation Agent, irrespective of possible obligations to issuers, to advise third parties, including investors and/or financial intermediaries, of any errors in the Index.

The publication of the Index by the Index Calculation Agent for the Index Administrator does not constitute a recommendation for capital investment and does not contain any assurance or opinion of the Index Administrator or the Index Calculation Agent regarding a possible investment in a financial instrument based on this Index.

3.2 Index Formulae (Hedged)

The Index is calculated as a net total return Index. The current withholding tax rates used for the calculation of the LPX Listed Private Credit AUD Hedged Index is accessible through the following ([link](#)). The calculation is performed according to the Equity Index Methodology, which is accessible through the following ([link](#)).

The standard divisor index formula stipulates that the level of the Index changes based on the change of the prices of its index components taking into account their weight in the Index and any currency conversion in case the price of an index components is quoted in a currency other than the index currency. Any dividends or other distributions are reinvested across the entire basket of index components by means of a divisor at the opening of the effective date “ex-date” of the payment of such dividend or other distribution. The document referenced above contains a detailed description of the mechanics involved in the calculation formula for the index in Section 1.2.

Accuracy

The level of the index will be rounded to six decimal places. Divisors will be rounded to six decimal places. Trading prices and foreign exchange rates will be rounded to six decimal places.

Adjustments

Under certain circumstances, an adjustment of the Index may be necessary between two ordinary rebalancing dates. Such adjustment has to be made if a corporate action (as specified in Section 4.4 below) in relation of an index component occurs. Such adjustment may have to be done in relation to an index component and/or may also affect the number of index components and/or the weighting of certain index components and will be made in compliance with Section 2.1 of the Equity Index Methodology, which is incorporated by reference and which is accessible through the following ([link](#)).

In the case an extraordinary event is not outlined the Equity Index Methodology, the Index Administrator will instruct the Index Calculation Agent on the Index adjustments. The Index adjustments will be implemented on the effective day specified in the respective notice.

Adjustments to the Index to account for corporate actions will be made by the Index Calculation Agent in compliance with Section 2.1 of the Equity Index Methodology with a brief definition and specifics of the relevant adjustment to the Index variables. While the Index Calculation Agent aims at creating and maintaining the methodology for the treatment of corporate actions as generic and transparent as possible and in line with regulatory requirements, the Index Administrator retains the right to deviate from these standard procedures specified in the Equity Index Methodology ([link](#)) in case of any unusual or complex corporate action or if such a deviation is made to preserve the comparability and representativeness of the Index over time. The Index Administrator will instruct the Index Calculation Agent on the index adjustments.

Market Disruption

In periods of market stress the Index Calculation Agent calculates indices following predefined and exhaustive arrangements as described in the Disruption Policy, which is incorporated by reference and accessible through the following ([link](#)). Such market stress can arise due to a variety of reasons, but generally results in inaccurate or delayed prices for one or more index components. The determination of the Index may be limited or impaired at times of illiquid or fragmented markets and market stress.

3.3 Hedged Index

Based on the standard divisor index, the hedged index value on a trading day at the relevant time is calculated in accordance with the following formula:

$$HI_t = HI_{RT} \times \left[1 + \left(\frac{UI_t}{UI_{RT}} - 1 \right) + HIM_t \right] \quad (1)$$

with

HI_t	Hedged Index on trading day t
HI_{RT}	Hedged Index on the rebalance day RT immediately preceding trading day t
UI_t	Underlying Index in local currency on trading day t
UI_{RT}	Underlying Index in local on the Rebalance Day RT immediately preceding trading day t
HIM_t	Hedge Impact on trading day t , calculated according to the following formula:

$$HIM_t = AF_{RT} \times \sum_{i=1}^n w_{i,ST} \times s_{i,ST}^m \times \left(\frac{1}{F_{i,RT}^m} - \frac{1}{IF_{i,t}^m} \right) \quad (2)$$

and

$$AF_{TR} = \frac{HI_{RT-1}}{HI_{RT}} \quad (3)$$

with

AF_{RT}	Adjustment Factor on trading day t
n	number of different currencies in the unhedged Index (without considering the currency in which the index is calculated)
$W_{i,ST}$	weight of currency i on selection date ST
$S_{i,ST}^m$	Mid Spot of currency i on day selection day ST
$F_{i,TR}^m$	Mid Forward Rate of currency i on rebalance day RT
$IF_{i,t}^m$	interpolated Forward on day t which is calculated as follows

The interpolated Forward on day $IF_{t,i}^m$ is calculated as follows:

$$IF_{i,t}^m = S_{i,t}^m + (F_{i,t}^m - S_{i,t}^m) \times \frac{D - d}{D} \quad (4)$$

$S_{i,t}^m$	currency i mid spot rate on trading day t
$F_{i,t}^m$	currency i 1 month forward mid-rate on trading day t
D	number of calendar days between the last and the next rebalance day
RT	
d	number of calendar days between the last Rebalance Day RT and trading day t

4 Amendments

- i The design and calculation methodology of the LPX Indices is overseen by index oversight on a regular basis at least once per year. The Index Oversight Directive is available upon request to all stakeholders. In case of a revision of the Guide, all stakeholders will be informed as soon as possible. The Guide is publicly available on the LPX corporate website.
- ii For complaints please contact complaints@lpx-group.com. Details concerning the complaint process can be obtained upon request.

5 Data Vendor Codes

The LPX Listed Private Credit indices are available via major third party data providers. An overview on the various data vendor codes is depicted in the following table.

Table 6: Data Vendor Codes

Total Return TR						
Name	CCY	Base Date	Launch Date	ISIN	Bloomberg	Reuters
LPX Listed Private Credit AUD Hedged	AUD	31.12.2008	02.01.2024	DE000SL0KQU7	LPXPCTRH	.LPXPCTRH

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