

# Palmer Square Indices Methodology

Palmer Square CLO Senior Debt Index (CLOSE)  
Palmer Square CLO Debt Index (CLODI)



---

July 31, 2023

The Palmer Square CLO Senior Debt Index (“CLO Senior Debt Index”) (ticker: CLOSE) and the Palmer Square CLO Debt Index (“CLO Debt Index”) (ticker: CLODI) are rules-based observable pricing and total return indices for collateralized loan obligation (“CLO”) debt for sale in the United States, original rated AAA, AA, A, BBB, BB or equivalent.

The following types of CLOs are eligible for inclusion in the Underlying CLO Indices:

- “Arbitrage” CLOs, collateralized by broadly syndicated loans
- Only floating rate tranches are eligible for inclusion
- Tranche must be denominated in U.S. dollar
- Closing date on or after January 1, 2009
- Minimum deal size of \$600 million for deals issued Jan 1, 2009 – Dec 31, 2012
- Minimum deal size of \$500 million for deals issued Dec 31, 2012 – current

The following types of CLOs are **NOT** eligible for inclusion in the Underlying CLO Indices:

- “Middle-market” CLOs, collateralized by loans to small or medium-sized firms and/or by loans of a small or medium size
- Fixed rate, revolver, combo, and step up notes
- Asset-backed CDOs, collateralized by residential, commercial or consumer credit loans
- Emerging market CLOs, collateralized by loans to or securities of emerging markets issuers
- “Balance Sheet” CLOs

In addition to being Original-Rated, AAA, AA, A, BBB, BB CLO debt eligible for inclusion in the Underlying CLO Debt Index must be issued on or after January 1, 2009, following the financial crisis of 2008. Index components must include debt issued by CLOs managed by managers who manage at least three outstanding CLOs, at least two of which commenced on or after January 1, 2009. For managers with more than 2 deals issued in one calendar year, the two largest based on par outstanding will be included. Additionally, the CLO tranches eligible for inclusion in the Underlying Index will include the top 50% based on deal issuance size per quarter. Using the Index’s rules-based criteria, Moody’s assigns a “diversity score” to eligible Index components, based on the diversification of the CLO’s underlying loan assets. CLOs that are collateralized by loans of a limited number of issuers or that are limited to a particular industry are considered to be less diversified and are assigned a lower diversity score. CLO debt with a score lower than 45 during its reinvestment period will be excluded from the Underlying Index, in accordance with the Underlying Index methodology. After the reinvestment period ends, deals originally in the Index will not be removed if the diversity score falls below 45. Each tranche of a CLO included in the Underlying CLO Debt Index is treated as a separate Index component. There is no limit to the number of components in the Underlying CLO Debt Index. Individual weightings are based on market value.

The Index will be rebalanced at the close of the last business day of each quarter, following the U.S. holiday calendar. Refinancing transactions will be included in rebalances at the close of the last business day of each month, following the U.S. holiday calendar. New transactions that meet the above inclusion criteria and that are priced by the service provider will be included.

## Palmer Square CLO Indices - Calculations

The indexes started on 5/29/2015 with a value of 100.00

On a daily basis the index is calculated as follows:

$$Index_t = Index_{t-1} \times (1 + TR_t)$$

Where:

$Index_t$	= Index close on day t
$Index_{t-1}$	= Index close on day t-1
$TR_t$	= Total Return on day t

### Market Value

The market value of each CLO index on day t is calculated as follows:

$$MV_t = \sum_{i=1}^n MF_t \times PAR_t \times \frac{P_t + AI_i}{100}$$

Where:

$MV_t$	= Market Value of the tranche i on day t
$Par_t$	= Par amount of the tranche i as of the last rebalance adjusted for principal pre-payments etc.
$P_t$	= Clean price of the tranche i on day t
$AI_i$	= Accrued interest on tranche i up to and including day t
$MF_t$	= Mortgage factor of tranche i used to adjust the par at principal paydown ( $0 \leq MF_t \leq 1$ )

The weights of the CLO tranche is defined as the market value of the tranche expressed as a percentage of the aggregate market value of all the tranches in the index portfolio

$$weight_k = \frac{MV_k}{\sum_{i=1}^n MV_i}$$

### Returns

#### Total Return

The Total Return  $TR_t$  of a tranche at time t is the sum of the Interest Return and the Price Return on the day t

$$TR_t = IR_{i,t} + PR_{i,t}$$

Where:

$IR_t$	= Interest Return on day t
$PR_t$	= Price Return on day t

Price return measures the return due to the change in the market price of the tranche. Interest Return (or Coupon Return) includes the return due to the interest earned on that tranche.

#### Interest Return

$$IR_{i,t} = \sum_{i=1}^n \frac{PAR_{i,t} \times C_{i,t} \times d_{i,t,t-1}/360}{MV_{i,beg}}$$

Where:

$IR_{i,t}$	= Interest Return of tranche i on day t
$PAR_{i,t}$	= Par balance of the tranche i as on day t adjusted for principal pre-payments etc.
$C_{i,t}$	= Coupon amount of tranche i as of day t
$d_{i,t,t-1}$	= Day-count from the previous business day, t-1 to today, t
$MV_{i,beg}$	= Market Value of tranche i at the beginning of day t

#### Price Return

$$PR_{i,t} = \sum_{i=1}^n \frac{PAR_{i,t} \times \left( \frac{P_{i,t} - P_{i,t-1}}{100} \right) + PP_{i,t} \times \left( \frac{RP - P_{i,t-1}}{100} \right)}{MV_{i,beg}}$$

Where:

$PR_{i,t}$	= Price Return of tranche i on day t
$PAR_{i,t}$	= Par balance of the tranche i as on day t adjusted for principal pre-payments etc.
$P_{i,t}$	= Clean price of tranche i on day t
$P_{i,t-1}$	= Clean price of tranche i in previous business day, t-1
$PP_{i,t-1}$	= Principal Prepayment of tranche i on day t
$MV_{i,beg}$	= Market Value of tranche i at the beginning of day t
RP	= Redemption Price, always 100

## Notes and Disclosure

This data is provided for informational purposes only and is not intended for trading purposes. This document shall not constitute an offering of any security, product or service. The addition, removal or inclusion of a security in the Palmer Square CLO Senior Debt Index and the Palmer Square CLO Debt Index (the "Indices") is not a recommendation to buy, sell, or hold that security, nor is it investment advice. It is not possible to invest directly in an index. Index performance does not reflect the deduction of any fees and expenses. Past performance is not a guarantee of future returns. There are risks involved with investing, including the possible loss of principal, that investors should be prepared to bear. The information contained herein should not be construed as personalized investment advice and should not be considered a solicitation to buy or sell any security or engage in a particular investment strategy.

The information contained in this document is current as of the publication date or as indicated herein. Palmer Square Capital Management LLC ("Palmer Square") makes no representations with respect to the accuracy or completeness of these materials and will not accept responsibility for damages, direct or indirect, resulting from an error or omission in this document. The methodology involves rebalancing and maintenance of the Indices that is made periodically during each year and may not, therefore, reflect real time information.

The Indices are the exclusive property of Palmer Square. The Indices are calculated by NYSE Group, Inc. or its affiliates ("NYSE"). NYSE MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INDICES OR ANY DATA INCLUDED THEREIN. IN NO EVENT SHALL NYSE HAVE ANY LIABILITY FOR ANY SPECIAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

This material is subject to change without notice, and should not be relied upon by the reader as research or investment advice. With regard to sources of information, certain of the economic and market information contained herein has been obtained from published sources and/or prepared by third parties. While such sources are believed to be reliable, Palmer Square employees or representatives do not assume any responsibility for the accuracy of such information.

The securities issued under the CLO transactions have not been registered under the Securities Act of 1933, as amended, and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. This overview shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of such securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

Palmer Square Capital Management LLC ("Palmer Square") is an SEC registered investment adviser with its principal place of business in the State of Kansas. Registration of an investment adviser does not imply any level of skill or training. Palmer Square and its representatives are in compliance with the current registration and notice filing requirements imposed upon registered investment advisers by those states in which Palmer Square maintains clients. Palmer Square may only transact business in those states in which it is notice filed, or qualifies for an exemption or exclusion from notice filing requirements. Any subsequent, direct communication by Palmer Square with a prospective client shall be conducted by a representative that is either registered or qualifies for an exemption or exclusion from registration in the state where the prospective client resides. For additional information about Palmer Square, including fees and services, send for our disclosure statement as set forth on Form ADV using the contact information herein or refer to the Investment Adviser Public Disclosure web site ([www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov)). Please read the disclosure statement carefully before you invest or send money.

No portion of this publication may be reproduced in any format or by any means including electronically or mechanically, by photocopying, or by any other form or manner whatsoever, without the prior written consent of Palmer Square.