# **US Enhanced Inflation Index (Series-L)**

The Bloomberg Barclays US Enhanced Inflation Index (Series-L) measures the combined performance of the US Treasury Inflation Protected Securities (TIPS) market and the US 7-10 Year breakeven inflation, as represented by the difference in performance of the US TIPS 7-10 Year Index and the duration adjusted performance of the US Treasury 7-10 Year Index. The index performance also accounts for a net total return swap funding cost for the 7-10 Year breakeven inflation exposure, which is reviewed annually. Federal Reserve holdings of US TIPS and US Treasury bonds are not index eligible and are excluded from the face amount outstanding of each bond in the index. The US Treasury Inflation Linked Bond Index was created in May 2020, with history backfilled to February 1, 2000.

## **Rules for Performance Calculation**

The US Enhanced Inflation index total return is defined as: **Total Return** 

US TIPS Total Return + [US TIPS 7-10 Year Total Return - (Duration Adjustment \* US Treasury 7-10 Year Total

Return)] - funding cost

Or using Bloomberg Terminal® tickers:

IO1551US + [I35595US - (Duration Adjustment \* LT09TRUU)] - funding cost

**Duration Adjustment** The duration adjustment is reset on a monthly basis and is calculated as:

Macaulay Duration US TIPS 7-10 Year Index / Macaulay Duration US Treasury 7-10 Year Index

Where Macaulay Duration is the last business day value of the previous month for Bloomberg Terminal® field

BX229 of the respective index, i.e.

Duration Adjustment = [I35595 (BX229 previous month end)]/ [LT09STAT (BX229 previous month end)]

The funding cost is reset annually, it is derived from the average of three dealer quotes for the net funding costs **Funding Cost** 

of entering a total return swap to receive the US TIPS 7-10 Year Total Return and pay the duration adjusted US Treasury 7-10 Year Total Return. This is applied as a 1/12th deduction to the total return on a monthly basis or a

1/360<sup>th</sup> on a daily basis.

## **Rules for Inclusion**

Country Eligibility	Only includes TIPS (I01551US, I35595US) or Treasury bonds (LT09TRUU) issued by the United States.
Quality	Securities must be rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used; when only one agency rates a bond, that rating is used. In cases where explicit bond level ratings may not be available, other sources may be used to classify securities by credit quality:
	<ul> <li>Local currency Treasury issues are classified using the middle issuer level rating from each agency for all outstanding bonds, even if bond level ratings are available.</li> </ul>

### **Amount Outstanding**

- USD TIPS 500mn minimum par amount outstanding (not adjusted for inflation indexation I01551US,
- USD Treasury bonds 300mn minimum par amount outstanding (LT09TRUU)
- US TIPS and US Treasuries held in the Federal Reserve SOMA account (both purchases at issuance and net secondary market transactions) are deducted from the total amount outstanding. New issuance bought at auction by the Federal Reserve does not enter the index.





Rules for Ir	

Net secondary market purchases/sales are adjusted in the Projected Universe of the index weekly, typically on
Fridays, and in the Returns Universe once a month, based on the amount outstanding in the Projected
Universe at prior month-end. 1

	Fridays, and in the Returns Universe once a month, Universe at prior month-end. 1	based on the amount outstanding in the Projected				
Eligible Currencies	Principal and interest must be denominated in USD.					
Coupon	Fixed-rate nominal coupon.					
Maturity	US TIPS Index (I01551US) – at least 1 year until final maturity.					
	<ul> <li>US TIPS 7-10 Year Index (I35595US) - between 7 and up to, but not including, 10 years remaining to final maturity.</li> </ul>					
	<ul> <li>US Treasury 7-10 Year Index (LT09TRUU) - between final maturity.</li> </ul>	n 7 and up to, but not including, 10 years remaining to				
Security Types	Included	Excluded				
	<ul> <li>US TIPS eligible bonds must be capital-indexed and linked to a commonly used domestic inflation index</li> <li>US Treasury public obligations</li> </ul>	9				

Bullet, putable, sinkable/amortizing and callable

bonds

# Rebalancing Rules

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For each index, Bloomberg maintains two universes of securities: the Returns (Backward) and the Projected (Forward) Universes. The composition of the Returns Universe is rebalanced at each month-end and represents the fixed set of bonds on which index returns are calculated for the next month. The Projected Universe is a forward-looking projection that changes daily to reflect issues dropping out of and entering the index but is not used for return calculations. On the last business day of the month (the rebalancing date), the composition of the latest Projected Universe becomes the Returns Universe for the following month.

STRIPS, Treasury bills, bellwethers

Private placements, retail bonds

## **Index Changes**

During the month, indicative changes to securities (credit rating change, sector reclassification, amount outstanding changes, corporate actions, and ticker changes) are reflected daily in the Projected and Returns Universe of the index. These changes may cause bonds to enter or fall out of the Projected Universe of the index on a daily basis, but will affect the composition of the Returns Universe at month-end only, when the index is next rebalanced.

#### Reinvestment of Cash Flows

Intra-month cash flows from interest and principal payments contribute to monthly index returns but are not reinvested at a short-term reinvestment rate between rebalance dates. At each rebalancing, cash is effectively reinvested into the returns universe for the following month so that index results over two or more months reflect monthly compounding.

## **New Issues**

Qualifying securities issued, but not necessarily settled on or before the month-end rebalancing date, qualify for inclusion in the following month's index if the required security reference information and pricing are readily available.

## **Pricing and Related Issues**

Sources & Frequency	All index-eligible bonds are priced daily basis by Bloomberg's evaluated pricing service, BVAL.
Pricing Quotes	The index uses mid-market prices according to local market quote conventions.

<sup>1</sup> All float adjustment updates to the US Treasury amount outstanding in the Projected Universe are made on or prior to T-3 (3 business days before month-end using the U.S. calendar). Further details about indices' treatment of SOMA holdings of US Treasuries can be found in this note.

## **Pricing and Related Issues**

Timing	<ul> <li>3pm (New York Time).</li> <li>On early market close, prices are taken as of 1pm on early close, unless otherwise noted.</li> <li>If the last business day is a public holiday, prices from the previous business day are used.</li> </ul>
Bid or Offer Side	TIPS bonds in the index are priced on the mid side, nominal bonds are priced on the bid side.
Settlement Assumptions	T+1 calendar day settlement basis.
	• At month-end, settlement is assumed to be the first calendar day of the following month, even if the last business day is not the last day of the month, to allow for one full month of accrued interest to be calculated.
Verification	Daily price moves for each security are analyzed by the index pricing team. Index users may also challenge price levels, which are then reviewed and updated as needed using input from various sources.
Currency Hedging	Returns hedged to various currencies are published for multi-currency indices. The indices' FX hedging methodology takes rolling one-month forward contracts that are reset at the end of each month and hedges each non-reporting currency-denominated bond in the index into the reporting currency terms. No adjustment is made to the hedge during the month to account for price movements of constituent securities in the returns universe of the index.
Calendar	The US TIPS Index (Series-L) and US Treasury 7-10 Year Index follow the US bond market holiday schedule.

## Monthly Returns in USD, 2011-2020 (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2011	0.91	1.58	1.80	3.57	-1.84	2.37	4.53	-3.28	-2.87	4.59	0.76	-1.46	10.73
2012	3.78	0.44	-0.27	1.59	0.68	-0.63	1.94	-0.17	1.63	1.86	-0.04	-0.60	10.58
2013	0.20	-0.82	0.29	-0.12	-5.78	-5.71	2.31	-2.39	1.93	0.18	-1.33	-1.44	- 12.30
2014	1.59	0.37	-0.67	1.84	2.70	0.72	0.25	-1.33	-4.04	0.06	-0.84	-2.85	-2.37
2015	2.93	-0.24	-1.88	2.34	-1.55	-0.34	-0.92	-1.86	-2.72	1.00	0.29	-1.37	-4.39
2016	-0.08	0.99	3.48	0.94	-1.59	1.10	1.30	-0.26	1.22	0.68	-0.09	-0.08	7.78
2017	1.60	0.13	-0.18	0.32	-1.05	-1.49	0.69	0.67	-0.17	0.57	0.47	1.57	3.14
2018	0.13	-1.02	0.85	1.09	-0.26	0.78	-0.53	0.36	-0.91	-2.37	-0.29	-1.71	-3.88
2019	2.21	0.40	1.25	1.11	0.25	0.64	0.84	0.41	-1.80	0.38	0.74	1.61	8.28
2020	1.17	-0.67	-7.08	4.99	0.57	-	-	-	-	-	-	-	-1.39

## **Accessing Index Data**

Bloomberg Terminal®	<ul> <li>Bloomberg benchmarks are the global standard for capital markets investors.</li> <li>INDEX<go> - The Bloomberg Indices Introduction page is a dashboard for index-related information on the terminal. Find daily and monthly index returns for key indices from each index family as well as index publications including methodologies, factsheets, monthly reports, updates and alerts.</go></li> <li>IN<go> - The Bloomberg Index Browser displays the latest performance results and statistics for the indices as well as history. IN presents the indices that make up Bloomberg's global, multi-asset class index families into a hierarchical view, facilitating navigation and comparisons. The "My Indices" tab allows a user to focus on a set of favorite indices.</go></li> <li>PORT<go> - Bloomberg's Portfolio &amp; Risk Analytics solution includes tools to analyze the risk, return, and</go></li> </ul>				
	current structure of indices. PORT includes tools to analyze performance of a portfolio versus a benchmark as well as models for performance attribution, tracking error analysis, value-at-risk, scenario analysis, and optimization.  • DES <go> - The index description page provides transparency into the current and projected index universe including membership information, aggregated characteristics and returns, and historical data.</go>				
Bloomberg Indices Website (www.bloomberg.com/ professional/product/indices)	The index website makes available limited index information including:  Index methodology and factsheets  Current performance numbers for select indices				
Data Distribution	<ul> <li>Index subscribers may choose to receive index data in files. Files may include:</li> <li>Index level and/or constituent level returns and characteristics for any indices</li> <li>Automatic delivery of files via email or SFTP following the completion of the index production process after market close</li> <li>Clients may receive standard files or may customize file contents</li> <li>Index data is also available via authorized redistributors</li> </ul>				

## Bloomberg Total Return Index Value Tickers: US Enhanced Inflation Index (Series-L) and Related Indices

Ticker (USD Unhedged)	Index	Ticker	Index		
135616US	US Enhanced Inflation	DTIPTRUU	US TIPS Duration Hedged Index		
LBUTTRUU	US TIPS (Series-L)	DTI5TRUU	US TIPS DHI - 50% Hedged Index		
135595US	US TIPS 7-10 Year (Series-L)	LF94TRUU	Global Inflation-Linked (Series-L)		
LT09TRUU	US Treasury 7-10 Year	MTIPTRUU	US TIPS Mirror Futures Index		

Total Return Index Values are available in other currencies and on a hedged basis. Attributes such as yield and duration, are also available. Please refer to Accessing Bloomberg Barclays Index Data Using Bloomberg Tickers for a full list of tickers and attributes that are available.

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