

S&P/LSTA U.S. Leveraged Loan 100 Index *Methodology*

December 2016

Table of Contents

Introduction	3
Highlights	3
Eligibility Criteria	4
Index Eligibility	4
Eligibility Factors	4
Timing of Changes	4
Sub-Index Rules	5
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating Index	5
Index Construction	6
Approaches	6
Index Calculation	6
Index Maintenance	7
Rebalancing	7
Frequency	7
Currency of Calculation	7
Base Dates and History Availability	8
Cash flows	8
Base Rate	8
Loan Interest Rate	8
Index Interest Rate	8
Index Governance	9
Index Committee	9
Index Policy	10
Announcements	10
Holiday Schedule	10
End-of-Day Calculation	10
Index Releases	10
Recalculation Policy	10
Index Dissemination	11
Tickers	11
FTP	11
Web site	11

Appendix I		12
	Defined Terms	12
Appendix II		13
	Calculation of Index Loan Market Values and Relative Weights	13
	Calculation of Index Loan Returns	13
	Calculation of Index Returns and Levels	15
	Currency Hedged Indices	16
S&P Dow Jones Indices' Contact Information		17
	Index Management	17
	Product Management	17
	Media Relations	17
	Client Services	17
Disclaimer		18

Introduction

The S&P/LSTA U.S. Leveraged Loan 100 (the index) is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market. The index consists of 100 loan facilities drawn from a larger benchmark – the S&P/LSTA (Loan Syndications and Trading Association) Leveraged Loan Index (LLI).

Highlights

The S&P/LSTA U.S. Leveraged Loan 100 is designed to reflect the largest facilities in the leveraged loan market. It mirrors the market-weighted performance of the largest institutional leveraged loans based upon market weightings, spreads and interest payments.

The hallmark of a rules-based index is transparency and, broadly speaking, predictability. The index is rules based, although the Index Committee reserves the right to exercise discretion when necessary. As an aide to transparency, this document sets out the rules by which the index is governed, index calculation and management procedures, and the various formulae used to calculate index returns and other statistics.

The S&P/LSTA U.S. Leveraged Loan 100 is rebalanced semi-annually to avoid excessive turnover, but reviewed weekly to reflect pay-downs and ensure that the index portfolio maintains 100 loan facilities.

Index returns and other statistics are calculated daily as described in *Appendix II*.

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

Eligibility Criteria

Index Eligibility

The constituents of the S&P/LSTA U.S. Leveraged Loan 100 (the index loans) are drawn from a universe of syndicated leveraged loans representing over 90% of the leveraged loan market.

Eligibility Factors

All syndicated leveraged loans covered by the S&P/LSTA Leveraged Loan Index universe are eligible for inclusion in the S&P/LSTA U.S. Leveraged Loan 100. Term loans from syndicated credits must meet the following criteria at issuance in order to be eligible for inclusion in the LLI:

- Senior secured
- Minimum initial term of one year
- Minimum initial spread of LIBOR + 125 basis points
- U.S. dollar denominated

CUSIPs. All constituents of the S&P/LSTA U.S. Leveraged Loan 100 (the index loans) must have a publicly assigned CUSIP.

Par Outstanding. The S&P/LSTA U.S. Leveraged Loan 100 is designed to include the largest loan facilities from the S&P/LSTA Leveraged Loan Index universe. Par outstanding is a key criterion for loan selection. Loan facilities are included if they are among the largest facilities from this index in terms of par amount outstanding.

Minimum Par Amount. There is no minimum size requirement on individual facilities in the S&P/LSTA U.S. Leveraged Loan 100, but the S&P/LSTA Loan Index universe minimum is US\$ 50 million. Only the 100 largest facilities from the S&P/LSTA Loan Index that meet all eligibility requirements are considered for inclusion.

Domicile. The index covers all issuers regardless of origin, however all facilities must be denominated in U.S. dollars.

2% Loan Cap. At each weekly review, which typically occurs on Friday, facilities that exceed 2% of the market value weight of the index are reduced to 1.90%.

Default. Defaulted loans remain in the S&P/LSTA U.S. Leveraged Loan 100 Index unless they no longer meet any of the other criteria for inclusion.

Timing of Changes

Additions. An index addition is generally made only if a vacancy is created by an index deletion. Index additions are reviewed on a weekly basis and are made according to par outstanding and overall liquidity. Liquidity is determined by the par outstanding and number of market bids available.

Deletions. Facilities are retired when they are no longer priced by LSTA/Thomson Reuters Mark-to-Market Pricing or when the facility is repaid.

Sub-Index Rules

S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating Index

The S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating Index is comprised of loans in the S&P/LSTA U.S. Leveraged Loan 100 with ratings between BB+ and B-. Standard & Poor's Rating Services is used to determine membership within this sub-index. At each weekly review, which typically occurs on Friday, facilities in this sub-index that exceed 2% of the market value weight of the index are reduced to 1.90%. In the unlikely scenario where the number of loan facilities in the index drops to 50 or less, the 2% capping rule on index constituents is voided, and the constituents are weighted equally as $1/N$, with N being the number of constituents in the index.

Index Construction

Approaches

The S&P/LSTA U.S. Leveraged Loan 100 is designed to measure the performance of the largest segment of the U.S. syndicated leveraged loan market.

Index Calculation

The S&P/LSTA U.S. Leveraged Loan 100 is a market value-weighted index. LSTA/Thomson Reuters Mark-to-Market Pricing is used to price each loan in the index. LSTA/Thomson Reuters Mark-to-Market Pricing is based on bid/ask quotes gathered from dealers and is not based upon derived pricing models. The index uses the average bid for its market value calculation.

Each loan facility's total return is calculated by aggregating the interest return, reflecting the return due to interest paid and accrued interest, and price return, reflecting the gains or losses due to changes in end-of-day prices and principal prepayments.

The return of each loan facility is weighted in the index based upon its market value outstanding, which reflects both the prior period's price as well as accrued interest. The overall index return is the composite of each component loan facility's return multiplied by the market value outstanding from the prior time period.

For further details regarding index calculations, please refer to Appendix II.

Index Maintenance

The Index is maintained in accordance with the following rules:

- A complete review and rebalancing of all index constituents is completed on a semi-annual basis effective after the close of the last business day in June and December.
- Eligible loan facilities approved by the Index Committee are added to the index during the semi-annual rebalancing. Eligible loan facilities are added to the index at the weekly review only if other facilities are repaid or otherwise drop out of the index, in order to maintain 100 index loans.
- Par amounts of index loans are adjusted on the weekly rebalancing date to reflect any changes that have occurred since the previous rebalancing date, due to partial pre-payments, pay-downs, etc.
- Constituent facilities are capped at 2% of the index and drawn-down at the weekly rebalancing. When a loan facility exceeds the 2% cap, the weight is reduced to 1.90% and the proceeds are invested in the other index components on a relative-weight basis.

Rebalancing

The index is normally reviewed and rebalanced on a weekly basis to maintain 100 constituents. The Index Committee, nevertheless, reserves the right to make adjustments to the index at any time that it believes appropriate.

Weekly index rebalancing maintenance (additions, deletions, pay-downs, and other changes to the index) is based on data as of Friday (or the last business day of the week in the case of holidays) and is announced the following Thursday (or Wednesday in the case of a holiday) for implementation on the following Friday. Announcements are made only if there are changes to the index. Highly probable weekly pay-downs are estimated each Friday and enter the return universe at that time, until they are adjusted with actual data the following week. Publicly available information, up to and including each Thursday's close, is considered in each weekly rebalancing.

Index changes published in the announcement generally are not subject to revision and become effective on the date listed in the announcement.

Frequency

The index is priced daily, reviewed weekly to ensure 100 eligible constituents, and is subject to an extensive semi-annual review and rebalancing.

Currency of Calculation

The S&P/LSTA U.S. Leveraged Loan 100 is calculated in U.S. dollars, Australian dollars, Canadian dollars, euros, Japanese yen, Singapore dollars, Swiss francs and British pounds.

The S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating Index is calculated in U.S. dollars, Canadian dollars and euros.

Currency hedged versions of these indices are also available.

Base Dates and History Availability

The index history availability, base dates and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P/LSTA U.S. Leveraged Loan 100 TR	10/20/2008	12/28/2001	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 CAD TR	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 CAD TR Hedged	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 AUD TR	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 AUD TR Hedged	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 EUR TR	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 EUR TR Hedged	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index CHF TR	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index CHF TR Hedged	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index GBP TR	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index GBP TR Hedged	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index JPY TR	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index JPY TR Hedged	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index SGD TR	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 Index SGD TR Hedged	08/12/2011	05/30/2007	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating Index	04/19/2013	12/28/2001	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating CAD Index	04/19/2013	12/28/2001	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating CAD Hedged Index	04/19/2013	12/28/2001	01/01/2002	1000
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating EUR Index	08/06/2015	12/28/2001	12/28/2001	1000
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating EUR Hedged Index	08/06/2015	07/25/2003	07/25/2003	1000

Cash flows

The S&P/LSTA U.S. Leveraged Loan 100 is rebalanced weekly to maintain 100 constituents. Interest payments are considered paid on a rolling 90-day basis from the date each loan enters the index and are reinvested in the index, on a relative-weight basis, after 90 days. Pre-payments, pay-downs, and most other forms of cash flow (other than scheduled interest payments) are reconciled at the end of each week to be considered part of that week's total return.

Base Rate

Each loan uses a base rate in the calculation of interest. This base rate represents the average contracted LIBOR rate set on institutional loans posted by the Markit WSOData loan database. The base rate, for index calculation purposes, is updated each Monday.

Loan Interest Rate

On each individual loan in the index, the loan interest rate is the base rate plus the spread relevant to each loan.

Index Interest Rate

The index interest rate is the sum of all loan interest rates multiplied by their relevant weights in the index.

Index Governance

Index Committee

The Index Committee maintains the index and is comprised of employees of S&P Dow Jones Indices and Leverage Commentary & Data. The Index Committee is chaired by the Managing Director and Index Committee Chairman at S&P Dow Jones Indices. Meetings are held annually and as needed. The Index Committee is solely responsible for all matters relating to methodology, maintenance, constituent selection and index procedures. The Index Committee makes decisions based on all available information and discussions are kept confidential to avoid any unnecessary impact on market trading.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Fixed Income Policies & Practices document located on our Web site, www.spdji.com.

Index Policy

Announcements

Announcements of any relevant information pertaining to the S&P/LSTA U.S. Leveraged Loan 100 are made at approximately 05:30 PM New York Time. Press releases are posted on S&P Dow Jones Indices' Web site at www.spdji.com.

Holiday Schedule

The index is calculated when the Securities Industry and Financial Markets Association (SIFMA[®]) declares the U.S. fixed income markets to be open.

End-of-Day Calculation

Index levels are calculated at the end of each business day, at approximately 04:00 PM New York Time. The current day's index levels are published via S&P Dow Jones Indices' Web site. On business days that SIFMA[®] recommends closing the U.S. fixed income markets early, index levels may be calculated at a time in accordance with the recommended early close time set for that day. Index levels are also posted on major quote vendors and other media outlets as noted in *Index Dissemination*.

Index Releases

Releases are issued by S&P Dow Jones Indices at the end of the business day. The release time is generally 07:00 PM New York Time.

Recalculation Policy

S&P Dow Jones Indices reserves the right to recalculate an index under certain limited circumstances. S&P Dow Jones Indices may choose to recalculate and republish an index if it is found to be incorrect or inconsistent within two trading days of the publication of the index level in question for one of the following reasons:

1. Index methodology event
2. Late announcement
3. Revised source data

Any other restatement or recalculation of an index is only done under extraordinary circumstances to reduce or avoid possible market impact or disruption as solely determined by the Index Committee.

For more information on the recalculation policy please refer to S&P Dow Jones Indices' Fixed Income Policies & Practices document located on our Web site, www.spdji.com.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Fixed Income Policies & Practices document located on our Web site, www.spdji.com.

Index Dissemination

Index levels are available through S&P Dow Jones Indices' website at www.spdji.com, major quote vendors (see codes below), numerous investment-oriented websites, and various print and electronic media.

Tickers

Index	Bloomberg
S&P/LSTA U.S. Leveraged Loan 100 TR	SPBDLL
S&P/LSTA U.S. Leveraged Loan 100 CAD TR	SPBDLLC
S&P/LSTA U.S. Leveraged Loan 100 CAD TR Hedged	SPBDLLCH
S&P/LSTA U.S. Leveraged Loan 100 AUD TR	SPBDLLA
S&P/LSTA U.S. Leveraged Loan 100 AUD TR Hedged	SPBDLLAH
S&P/LSTA U.S. Leveraged Loan 100 EUR TR	SPBDLLE
S&P/LSTA U.S. Leveraged Loan 100 EUR TR Hedged	SPBDLLEH
S&P/LSTA U.S. Leveraged Loan 100 Index CHF TR	SPBDLLF
S&P/LSTA U.S. Leveraged Loan 100 Index CHF TR Hedged	SPBDLLFH
S&P/LSTA U.S. Leveraged Loan 100 Index GBP TR	SPBDLLG
S&P/LSTA U.S. Leveraged Loan 100 Index GBP TR Hedged	SPBDLLGH
S&P/LSTA U.S. Leveraged Loan 100 Index JPY TR	SPBDLLJ
S&P/LSTA U.S. Leveraged Loan 100 Index JPY TR Hedged	SPBDLLJH
S&P/LSTA U.S. Leveraged Loan 100 Index SGD TR	SPBDLLS
S&P/LSTA U.S. Leveraged Loan 100 Index SGD TR Hedged	SPBDLLSH
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating Index	SPBDRL
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating CAD Index	SPBDRLC
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating CAD Hedged Index	SPBDRLCH
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating EUR Index	SPBDRLE
S&P/LSTA U.S. Leveraged Loan 100 B/BB Rating EUR Hedged Index	SPBDRLEH

FTP

Daily index levels and index data are available via FTP subscription.

For product information, please contact S&P Dow Jones Indices, www.spdji.com/contact-us.

Web site

For further information, please refer to S&P Dow Jones Indices' Web site at www.spdji.com.

Appendix I

Defined Terms

Announcement Date. The date on which changes to the index are published, as further described in the section on index maintenance.

Business Day. Any day that U.S. leveraged loans are traded, as determined by the Securities Industry and Financial Markets Association (SIFMA[®]) and/or the New York Stock Exchange.

Close. The end of a calendar or business day for the purpose of calculating index values and other statistics, currently 04:00 PM New York Time.

Eligible Loan. A loan that meets all of the eligibility criteria, based on publicly available information as of the close of the business day preceding the announcement date, but is not already an index loan.

Facility. A syndicated loan (or credit) is comprised of facilities (or tranches). Each facility can have different maturities, sizes, spreads and terms to fulfill a variety of borrowing needs. The S&P/LSTA U.S. Leveraged Loan 100 Index only includes term loans, which generally are fully funded at origination.

Index. The S&P/LSTA U.S. Leveraged Loan 100 Index.

Index Loan. A facility that is included in the index.

Par Amount. The total par or “face value” amount outstanding of an index loan or an eligible loan as determined by the Index Committee, net of partial calls and tenders.

Rebalancing Date. Every Friday (or the last trading day of the week in the case of a holiday), when the changes to the index published on the announcement date become effective, as further described in the section on index maintenance.

Investable Weight Factor (IWF). The adjustment factor used to reduce the weight of a particular security in the index if it exceeds the designated percentage cap. Unstated, an IWF’s default is 1.0.

Appendix II

Calculation of Index Loan Market Values and Relative Weights

The market value for each index loan is calculated as of the close on each calendar day.

The market value of an index loan on day t is calculated as follows:

$$MV_t = IWF * PAR_t * \frac{(P_t + A_t)}{100} \quad (1)$$

where:

MV_t = The market value of index loan on day t .

PAR_t = The par amount of index loan as of the last weekly rebalancing, adjusted for principal pre-payments, etc., up to and including day t .

P_t = The price of index loan on day t .

A_t = The accrued interest¹ on index loan up to and including day t .

IWF = The investable weight factor used to adjust the par amount when a loan is capped ($0 \leq IWF \leq 1$).

If the valuation date is not a business day, the market value is based on the price as of the immediate prior business day, plus interest accrued to the valuation date.

The Investable Weight Factor (IWF) is used to reduce the weight of a loan to less than 2% if the loan exceeds the maximum 2% weight. At each rebalancing, the loan weights are checked; if any loan exceeds 2%, its IWF is reduced until its weight is 1.90% and all the loans are reviewed for adjusted weights. If necessary, further IWF adjustments are made until no loan exceeds 2% weight.

The relative weight of an index loan is defined as the market value of that loan expressed as a percentage of the aggregate market value of all index loans in the index portfolio, as follows:

$$weight_k = \frac{IWF_k * MV_k}{\sum_k [IWF_k * MV_k]} \quad (2)$$

Calculation of Index Loan Returns

Returns are calculated for all index loans on every calendar day.

Total Return

The total return, TR , of an index loan at time t is the sum of the interest return and the market price return on day t .

$$TR_t = IR_t + PR_t \quad (3)$$

¹ A_t in (1) is calculated on a 360-day basis. Accrued interest is reduced to zero every 90 days after a loan enters the index.

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 loan. Interest return (or coupon return) includes the return due to the interest earned on that loan.

Interest Return

In the following formula, PAR should be treated as $(IWF*PAR)$. The formula for the interest return on an individual index loan on day t is as follows:

$$IR_t = \frac{(PAR_t * R_t) / 360}{MV_{Beg}} \quad (4)$$

where:

IR_t = Interest return on day t .

PAR_t = Par amount of the index loan as of the last weekly rebalancing, adjusted for principal pre-payments, etc., up to and including day t .

R_t = Interest rate on day t .

MV_{Beg} = Market value, at the beginning of day t .

Index Interest Rate

The index interest rate is determined by the weighted average spread to LIBOR over the rate as provided by Wall Street Office™.

Price Return

The formula for the price return for an index loan on day t is as follows:

$$PR_t = \frac{PAR_t * \left(\frac{P_t - P_{t-1}}{100} \right) + Prin_t * \frac{RP - P_{t-1}}{100}}{MV_{Beg}} \quad (5)$$

where:

PR_t = Price return on day t .

PAR_t = Par Amount of the Index Loan as of the last weekly rebalancing, adjusted for principal pre-payments, etc., up to and including day t .

P_t = Loan price on day t .

P_{t-1} = Loan price on the previous day.

$Prin_t$ = Principal pre-payments, etc., on day t .

MV_{Beg} = Market value, beginning of day t .

RP = Redemption price.

Note that the formula for the Price Return (5) itself has two components. The first term, in the numerator on the left side, represents the unrealized return due to any change in the price, while the second term

(on the right) represents the realized return due to receiving a principal repayment at the Redemption Price (which could differ from par) rather than at the current end of day price.

Calculation of Index Returns and Levels

Daily Index Returns

The individual index loan returns are aggregated to calculate returns for the index. Specifically, the total return, interest return and price return for the index, on a given day, are equal to a weighted average of the returns of the index loans that constitute the index — with the weight of each index loan return being equal to the relative weight of that index loan in the index as of the previous calendar day (adjusted for principal pre-payments, etc.). The formula is as follows:

$$IndexTR_t = \frac{\sum_i MV_{i,Beg} * TR_{i,t}}{\sum_i MV_{i,Beg}}$$

$$IndexIR_t = \frac{\sum_i MV_{i,Beg} * IR_{i,t}}{\sum_i MV_{i,Beg}}$$

$$IndexPR_t = \frac{\sum_i MV_{i,Beg} * PR_{i,t}}{\sum_i MV_{i,Beg}}$$

where:

$TR_{i,t}$ = Total return of the index loan i on day t .

$IR_{i,t}$ = Interest return of the index loan i on day t .

$PR_{i,t}$ = Price return of the index loan i on day t .

$MV_{i,Beg}$ = Market value of the index loan, beginning of day t .

Daily Index Values

Index values are calculated each day by applying the current day's index return to the previous day's index value, as follows:

$$TRIV_t = TRIV_{t-1} * (1 + TR_t)$$

$$PRIV_t = PRIV_{t-1} * (1 + PR_t)$$

$$IRIV_t = IRIV_{t-1} * (1 + IR_t)$$

where:

$TRIV_t$ = Total return index value on day t .

$PRIV_t$ = Price return index value on day t .

$IRIV_t$ = Interest return index value on day t .

Currency Hedged Indices

A currency-hedged index is designed to represent returns for those global index investment strategies that involve hedging currency risk², but not the underlying constituent risk.

Investors employing a currency-hedged strategy seek to eliminate the risk of currency fluctuations and are willing to sacrifice potential currency gains. By selling foreign exchange forward contracts, global investors are able to lock in current exchange forward rates and manage their currency risk. Profits (losses) from the forward contracts are offset by losses (profits) in the value of the currency, thereby negating exposure to the currency.

Return Definitions

S&P Dow Jones Indices' standard currency hedged indices are calculated by hedging beginning-of-period balances using rolling one-month forward contracts. The amount hedged is adjusted on a monthly basis.

$$H = \left(1 + \frac{\text{IndexYTM}}{2}\right)^{1/6}$$

$$FF_{i,30-i} = FX_0 + (FF_{0,30} - FX_0) * \frac{30-i}{30}$$

$$TR_H = R_L + (1 + R_L - H) * \frac{FX_i - FX_0}{FX_0} + H * \left(\frac{FF_{0,30} - FX_i}{FX_0} - \frac{FF_{i,30-i} - FX_i}{FX_i}\right)$$

where:

H = Hedge ratio.

IndexYTM = Index Yield to Maturity on rebalancing date.

$FF_{i,30-i}$ = Forward rate on date i with $30-i$ remaining days in the contract.

FX_0 = FX rate on rebalancing date.

$FF_{0,30}$ = Forward rate on rebalancing date with 30 remaining days in the contract.

TR_H = Total hedged return on date i .

R_L = Total local currency return on date i .

FX_i = FX rate on date i .

² By currency risk, we simply mean the risk attributable to the security trading in a currency different from the investor's home currency. This definition does not incorporate risks that exchange rate changes can have on an underlying security's price performance.

S&P Dow Jones Indices' Contact Information

Index Management

David M. Blitzer, Ph.D. – Managing Director & Chairman of the Index Committee
david.blitzer@spglobal.com +1.212.438.3907

Product Management

J.R. Rieger – Vice President, Fixed Income Indices
james.rieger@spglobal.com +1.212.438.5266
Kevin Horan – Director, Fixed Income Indices
kevin.horan@spglobal.com +1.212.438.8814

Media Relations

Soogyung Jordan – Communications
soogyung.jordan@spglobal.com +1.212.438.2297

Client Services

index_services@spglobal.com

Disclaimer

Copyright © 2016 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. STANDARD & POOR'S, S&P, SPDR, S&P 500, S&P EUROPE 350, S&P 100, S&P 1000, S&P COMPOSITE 1500, S&P MIDCAP 400, S&P SMALLCAP 600, GIVI, GLOBAL TITANS, S&P RISK CONTROL INDICES, S&P GLOBAL THEMATIC INDICES, S&P TARGET DATE INDICES, S&P TARGET RISK INDICES, DIVIDEND ARISTOCRATS, STARS, GICS, HOUSINGVIEWS, INDEX ALERT, INDEXOLOGY, MARKET ATTRIBUTES, PRACTICE ESSENTIALS, S&P HEALTHCARE MONITOR, SPICE, and SPIVA are registered trademarks of Standard & Poor's Financial Services LLC, a division of S&P Global ("S&P"). DOW JONES, DJ, DJIA and DOW JONES INDUSTRIAL AVERAGE are registered trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without written permission. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, Dow Jones, S&P or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. All information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties. Past performance of an index is not a guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY

SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as Standard & Poor's Financial Services LLC and S&P Capital IQ LLC. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Dow Jones Indices LLC does not act as a fiduciary or an investment advisor. While S&P Dow Jones Indices has obtained information from sources they believe to be reliable, S&P Dow Jones Indices does not perform an audit or undertake any duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings Services reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings Services, disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof.

Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings Services, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings Services, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings Services are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Rating Services publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.

LSTA is a trademark of Loan Syndications and Trading Association, Inc. and has been licensed for use by S&P Dow Jones Indices.