

# JPMorgan U.S. Sector Rotator TR Series X Index

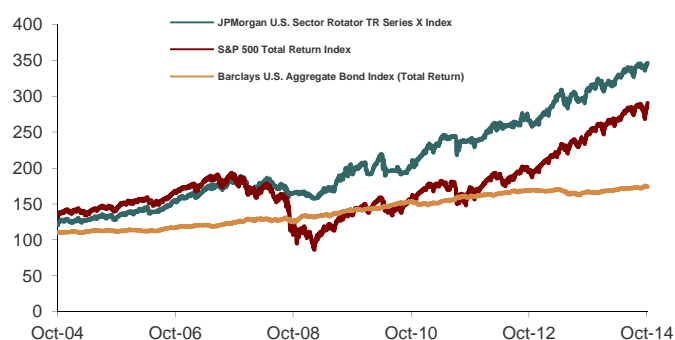
## Performance Update - November 2014

### OVERVIEW

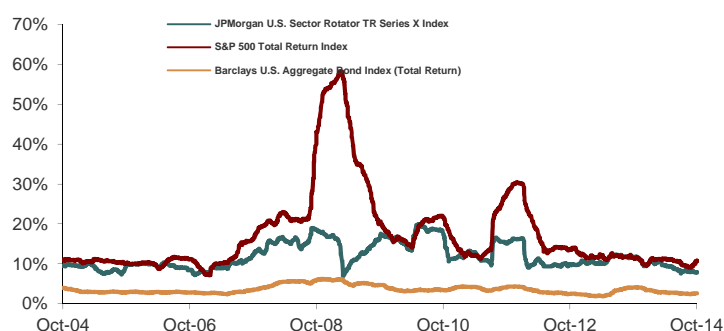
JPMorgan U.S. Sector Rotator TR Series X Index (the "Index") is a J.P. Morgan index that tracks the total return of a monthly reconstituted portfolio of exchange-traded funds ("ETFs") selected out of a pool of ten U.S. sector ETFs and a U.S. short term treasury bond ETF based on a momentum and equal-volatility weighted approach.



### Hypothetical and Actual Historical Performance - October 29, 2004 to October 31, 2014



### Hypothetical and Actual Historical Volatility - October 29, 2004 to October 31, 2014



### Key Features of the Index

- The Index selects from a universe of 11 ETFs covering 10 US Sector ETFs and 1 Short Term Treasury Bond ETF.
- Monthly rebalancing on the top 5 positive performing US Sector ETFs with an allocation to the Short Term Treasury Bond ETF otherwise
- Volatility mitigation monthly mechanism as the strategy de-leverages by allocating to the Short Term Treasury Bond ETF in high volatility regime.
- Levels published on Bloomberg under the ticker JPUSSTO.

Hypothetical and Actual Historical Performance*	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full Year
2014	-4.67%	2.95%	0.06%	2.96%	1.31%	1.62%	-2.17%	3.82%	-0.89%	1.88%			6.75%**
2013	3.75%	1.26%	4.70%	3.69%	-3.05%	-0.93%	4.22%	-3.25%	1.05%	4.19%	2.58%	2.69%	22.53%
2012	1.43%	4.16%	3.07%	0.27%	-1.64%	0.74%	1.24%	-0.83%	2.92%	-0.75%	-1.09%	0.56%	10.37%
2011	3.38%	3.68%	-0.09%	4.01%	1.73%	-0.84%	0.28%	-2.68%	-0.04%	0.74%	-0.38%	0.59%	10.68%
2010	-6.01%	0.21%	7.05%	3.81%	-8.55%	0.42%	0.22%	-2.03%	0.65%	4.29%	1.10%	5.95%	6.12%

\*Represents the monthly and full calendar year performance of the Index based on, as applicable to the relevant or annual measurement period, the hypothetical back tested daily Index closing levels from December 31, 2009 to August 17, 2014, and the actual historical performance of the index based on the daily closing levels from August 18, 2014 to October 31, 2014. See the last paragraph under "Notes" on page 2 for important information about the limitations of using hypothetical historical performance measures.

\*\*As calculated through October 31, 2014

### Recent Index Composition

	Consumer Discretionary Select Sector SPDR Fund	Consumer Staple Select Sector SPDR Fund	Energy Select Sector SPDR Fund	Financial Select Sector SPDR Fund	Health Care Select Sector SPDR Fund	Industrial Select Sector SPDR Fund	Utilities Select Sector SPDR Fund	Materials Select Sector SPDR Fund	Technology Select Sector SPDR Fund	SPDR Dow Jones REIT ETF	iShares 1-3 Year Treasury Bond ETF
November 14	0.0%	25.2%	0.0%	0.0%	14.1%	13.9%	21.0%	0.0%	0.0%	25.7%	0.0%
October 14	0.0%	22.2%	0.0%	0.0%	17.8%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%

November 05, 2014

## Comparative Hypothetical and Historical Total Returns (%), Volatility (%) and Correlation – October 31, 2014

	Three Year Annualized Return	Five Year Annualized Return	Ten Year Annualized Return	Ten Year Annualized Volatility	Ten Year Sharpe Ratio	Ten Year Correlation
JPMorgan U.S. Sector Rotator TR Series X Index	13.1%	12.6%	11.1%	12.3%	0.90	100.0%
S&P 500 Total Return Index	19.8%	16.7%	8.2%	20.4%	0.40	67.5%
Barclays U.S. Aggregate Bond Index (Total Return)	2.7%	4.2%	4.6%	3.7%	1.26	-21.1%

### Notes

**Hypothetical, historical performance measures:** Represents the performance of the JPMorgan U.S. Sector Rotator TR Series X Index based on, as applicable to the relevant measurement period, the hypothetical backtested daily closing levels through August 17, 2014 and actual performance from August 18, 2014 through October 31, 2014, as well as the actual performance of the S&P 500 Total Return Index and the Barclays U.S. Aggregate Bond Index over the same periods. For purposes of these examples, each index was set equal to 100 at the beginning of the relevant measurement period and returns are calculated arithmetically (not compounded). There is no guarantee the J.P. Morgan US Sector Rotator TR Series X Index will outperform the S&P 500 Total Return Index, the Barclays U.S. Aggregate Bond Index or any alternative investment strategy. Sources: Bloomberg and JPMorgan.

S&P 500 Total Return Index represents the total returns of the S&P 500 Index. Barclays U.S. Aggregate Bond Index (Total Return) represents the returns of the Barclays U.S. Aggregate Bond Index.

**Volatility:** hypothetical, historical annualized volatility levels are presented for informational purposes only. Volatility levels are calculated from the hypothetical historical returns, as applicable to the relevant measurement period, of the JPMorgan US Sector Rotator TR Series X Index, S&P 500 Total Return Index, and the Barclays U.S. Aggregate Bond Index.

Volatility represents the annualized standard deviation of the relevant index's arithmetic hypothetical daily returns since October 29, 2004. The Sharpe Ratio, which is an hypothetical measure of risk-performance, is computed as the ten year annualized historical return divided by the ten year annualized volatility.

**Correlation:** Correlation refers to the performance of the relevant index to the JPMorgan U.S. Sector Rotator TR Series X Index.

The back-tested, hypothetical, historical annualized volatility and index returns may use substitutes for any ETF that was not in existence or did not meet the liquidity standards at that particular time. The back-tested, hypothetical, historical annualized volatility and index returns have inherent limitations. These volatility and return results were achieved by means of a retroactive application of a back-tested volatility model designed with the benefit of hindsight. No representation is made that in the future the relevant indices will have the volatility shown. Alternative modeling techniques or assumptions might produce significantly different results and may prove to be more appropriate. Actual annualized volatilities and returns may vary materially from this analysis. Source: Bloomberg and JPMorgan.

### Key Risks

- There are risks associated with a momentum-based investment strategy—The JPMorgan U.S. Sector Rotator TR Series X Index (the "Index") is different from a strategy that seeks long-term exposure to a portfolio consisting of constant components with fixed weights. The Index may fail to realize gains that could occur from holding assets that have experienced price declines, but experience a sudden price spike thereafter.
- Correlation of performances among the constituents may reduce the performance of the Index—performances among the constituents comprising the Index from time to time (the "Constituents") may become highly correlated from time to time during the term of your investment. High correlation during periods of negative returns among Constituents representing any one sector or asset type that have a substantial weighting in the Index could have a material adverse effect on the performance of the Index.
- Our affiliate, JPMS plc, is the Index sponsor and may adjust the Index in a way that affects its level—The policies and judgments for which JPMS plc is responsible could have an impact, positive or negative, on the level of the Index and the value of your investment. JPMS plc is under no obligation to consider your interest as an investor with returns linked to the Index.
- The Index may not be successful and may not outperform any alternative strategy related to the Constituents.
- The investment strategy involves monthly rebalancing and maximum weighting caps applied to the Constituents by asset type that may reduce your return.
- Changes in the value of the Constituents may offset each other.
- The Index comprises notional assets and liabilities. There is no actual portfolio of assets to which any person is entitled or in which any person has any ownership interest.
- The Index was established on August 18, 2014 and has a limited operating history.

*The risks identified above are not exhaustive. You should also review carefully the related "Risk Factors" section in any relevant product supplement, underlying supplement, term sheet or pricing supplement.*

You may access the Index Rules at [www.sec.gov](http://www.sec.gov) as follows: [http://www.sec.gov/Archives/edgar/data/19617/000095010314007302/crt\\_dp50334-fwp.pdf](http://www.sec.gov/Archives/edgar/data/19617/000095010314007302/crt_dp50334-fwp.pdf)

### Disclaimer

JPMorgan Chase & Co. ("J.P. Morgan") has filed a registration statement (including a prospectus) with the Securities and Exchange Commission (the "SEC") for any offerings to which these materials relate. Before you invest in any offering of securities by J.P. Morgan, you should read the prospectus in that registration statement, the prospectus supplement, as well as the particular product supplement, the relevant term sheet or pricing supplement, and any other documents that J.P. Morgan will file with the SEC relating to such offering for more complete information about J.P. Morgan and the offering of any securities. You may get these documents without cost by visiting EDGAR on the SEC Website at [www.sec.gov](http://www.sec.gov). Alternatively, J.P. Morgan, any agent, or any dealer participating in the particular offering will arrange to send you the prospectus and the prospectus supplement, as well as any product supplement and term sheet or pricing supplement, if you so request by calling toll-free (866) 535-9248.

*Free Writing Prospectus filed pursuant to Rule 433; Registration Statement No. 333-177923*

J.P. Morgan Structured Investments | 800 576 3529 | [JPM\\_Structured\\_Investments@jpmorgan.com](mailto:JPM_Structured_Investments@jpmorgan.com)

# JPMorgan U.S. Sector Rotator Series X Index Series

## Index Rules

**J.P.Morgan**

August 19, 2014, as amended and restated on October 20, 2014

© All Rights Reserved

## JPMorgan U.S. Sector Rotator Series X Index Series – Index Rules

Each JPMorgan U.S. Sector Rotator Series X Index is a notional rules-based proprietary index (the “**Index**”), which tracks the total returns of (a) (i) 5 of 10 possible U.S. Sector Constituents, which are U.S. sector exchange-traded funds, that are selected according to their past month return, or (ii) if fewer than 5 of the 10 U.S. Sector Constituents meet the selection criteria, the U.S. Sector Constituents that meet the selection criteria and the Bond Constituent and (b) if the total weight of the U.S. Sector Constituents is less than 100%, the Bond Constituent.

The rules of each Index (the “**Index Rules**”) are set out in the following sections of this document:

- (a) **Notices, Disclaimers and Conflicts Disclosures** – contains important notices, disclaimers and conflicts of interest disclosures relating to each Index;
- (b) **Part A: General Rules** – contains general rules relating to the operation of each Index, such as (without limitation) rules relating to: (i) amending the Index Rules; (ii) the Index Calculation Agent (as defined in Part A: General Rules); (iii) corrections to an Index; and (iv) adjusting or terminating an Index following certain extraordinary events;
- (c) **Part B: Index Algorithm** – contains the algorithm used by the Index Calculation Agent to determine Index Levels (as defined in Part A: General Rules) and other related rules, such as (without limitation) rules dealing with market disruption events affecting a constituent of an Index; and
- (d) **Part C: Index Details** – contains specific information about each Index, such as (without limitation):
  - (i) Name of the Index;
  - (ii) Bloomberg Ticker;
  - (iii) Index Currency;
  - (iv) Index Base Date;
  - (v) Index Base Level;
  - (vi) Index Live Date;
  - (vii) Index Live Level;
  - (viii) Aggregate Volatility Cap;
  - (ix) Adjustment Factor;
  - (x) Index Calculation Day(s);
  - (xi) Index Rebalancing Day(s);
  - (xii) Index Selection Day(s); and
  - (xiii) Base Weights.

**ALL PERSONS READING THIS DOCUMENT SHOULD REFER TO THE NOTICES, DISCLAIMERS AND CONFLICTS DISCLOSURES ON PAGE 2 AND CONSIDER THE INFORMATION CONTAINED IN THIS DOCUMENT IN LIGHT OF SUCH NOTICES, DISCLAIMERS AND CONFLICTS DISCLOSURES.**

## Notices, Disclaimers and Conflicts Disclosures

**THESE INDEX RULES, IN ISOLATION, DO NOT CONSTITUTE AN OFFER TO PURCHASE OR SELL SECURITIES OR PARTICIPATE IN ANY TRANSACTION, OR ADVICE OF ANY KIND (TAX, ACCOUNTING, LEGAL OR REGULATORY) IN RESPECT OF AN INDEX OR ANY INVESTMENT STRATEGY OR CONSTITUENT OF AN INDEX.**

J.P. Morgan Securities plc ("**JPMS**"), in its capacity as Index Sponsor and Index Calculation Agent, does not endorse or make any representation or warranty, express or implied, in connection with investments linked to an Index ("**Product**"). Further, JPMS, in its capacity as Index Sponsor and Index Calculation Agent, has no obligation or liability in connection with the administration, marketing or trading of any Product.

No one may reproduce or disseminate the information contained in this document or the Index Level (as applicable) without the prior written consent of the Index Calculation Agent. This document is not intended for distribution to, or use by, any person in a jurisdiction where such distribution is prohibited by law or regulation.

Each of the Indices is the exclusive property of JPMS, and the Index Sponsor retains all proprietary rights therein.

Copyright JPMorgan Chase & Co. 2014. All rights reserved. JPMorgan is the marketing name for J.P. Morgan Chase & Co. and its subsidiaries and affiliates worldwide.

Potential conflicts of interest may arise from the structure or operation of an Index or the conduct of normal business activities on the part of the Index Calculation Agent or any of its affiliates or subsidiaries or their respective directors, officers, employees, representatives, delegates or agents (each, a "**Relevant Person**").

During the course of its normal business, the Index Calculation Agent or any Relevant Person may enter into or promote, offer or sell transactions or investments (structured or otherwise) linked to an Index or any constituent of an Index. In addition, any Relevant Person may have, or may have had, interests or positions, or may buy, sell or otherwise trade positions in or relating to an Index or any constituent of an Index, or may invest or engage in transactions with other persons, or on behalf of such persons, relating to an Index or any constituent of an Index. Such activity could give rise to a conflict of interest, and such conflict may have an impact, positive or negative, on the level of an Index or the value of a related Product. Neither the Index Calculation Agent nor any Relevant Person has any duty to consider the circumstances of any person when participating in such transactions or to conduct itself in a manner that is favorable to anyone with exposure to an Index or a related Product.

The Index Calculation Agent is under no obligation to continue the calculation, publication or dissemination of an Index.

The foregoing notices, disclaimers and conflicts disclosures are not intended to be exhaustive. Anyone reading these Index Rules should seek such advice as they consider necessary from their professional advisers, legal, tax or otherwise, without reliance on the Index Calculation Agent or any Relevant Person to satisfy themselves that they fully understand these Index Rules and the risks associated with an Index or any related Product.

THIS DOCUMENT IS INTENDED FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INTENDED AS AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY SHARES OF ANY EXCHANGE-TRADED FUND (ETF) IDENTIFIED IN THESE STRATEGY RULES. INVESTORS MAY OBTAIN PROSPECTUSES FOR ETFs FROM EACH PARTICULAR ETF'S DISTRIBUTOR. AN INVESTOR SHOULD CAREFULLY CONSIDER THE CONFLICTS OF INTEREST DESCRIBED ABOVE AS WELL AS THE INVESTMENT OBJECTIVES, RISKS AND CHARGES AND EXPENSES OF AN ETF BEFORE INVESTING IN ANY PRODUCT. EACH ETF'S PROSPECTUS CONTAINS MORE COMPLETE, IMPORTANT INFORMATION ABOUT THE ETF, INCLUDING WHETHER THE INDEX SPONSOR OR THE INDEX CALCULATION AGENT (OR ANY OF THEIR RESPECTIVE AFFILIATES OR SUBSIDIARIES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, REPRESENTATIVES, DELEGATES OR AGENTS) ACTS AS CUSTODIAN OR INDEX LICENSOR FOR THE ETF, AND SHOULD BE READ CAREFULLY BEFORE INVESTING. TO OBTAIN MORE INFORMATION, INCLUDING HOW TO OBTAIN A COPY

OF THE PROSPECTUS OF ANY ETF IDENTIFIED IN THESE STRATEGY RULES, PLEASE  
CONTACT YOUR J.P. MORGAN REPRESENTATIVE.

## **PART A**

### **General Rules**

#### **1. Index Rules**

##### **1.1 Publication**

The Index Rules are published by J.P. Morgan Securities plc of 25 Bank Street, Canary Wharf, London E14 5JP, United Kingdom in its capacity as Index Sponsor (the “**Index Sponsor**”).

Copies of the Index Rules may be obtained free of charge on request to the Index Sponsor.

##### **1.2 Amendments**

The Index Rules may be amended from time to time at the discretion of the Index Sponsor and will be made available (in a manner determined by the Index Calculation Agent from time to time) following such amendment.

Although the Index Rules are intended to be comprehensive and accurate, ambiguities may arise and errors or omissions may have been made. If so, the Index Calculation Agent will resolve such ambiguities and, if necessary, amend the Index Rules to reflect such resolution. In the case of any inaccuracy, the Index Calculation Agent may amend the Index Rules to address errors or omissions.

##### **1.3 No advice or offer of securities**

The Index Rules do not constitute investment, taxation, legal, accounting or other advice, including within the meaning of Article 53 of the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 or Article 4(4) of the Markets in Financial Instruments Directive 2004/39/EC. In constructing, calculating or otherwise performing any activity with respect to an Index, the Index Sponsor or the Index Calculation Agent (as the case may be) is solely using information that is already in the public domain.

The Index Rules neither constitute an offer to purchase or sell securities nor constitute specific advice of whatever form (tax, legal, accounting or regulatory) in respect of any investment strategy or investment that may be linked to an Index.

#### **2. Synthetic strategies, no underlying constituents or assets held**

Each Index is constructed on a notional or synthetic exposure to a basket of Constituents referenced in such Index and there is no actual portfolio of Constituents or other assets to which any person is entitled or in which any person has any ownership interest. Each Index merely identifies a number of Constituents, certain weights to be allocated to such Constituents, and a rules-based trading strategy, the performances of which are used as a reference point for the purpose of calculating Index Levels.

#### **3. Index Calculation Agent**

##### **3.1 Identity**

In respect of each Index, the Index Sponsor may designate any entity (including an unrelated third party) from time to time to act as calculation agent in connection with such Index (the “**Index Calculation Agent**”). Unless the Index Sponsor designates another entity as the Index Calculation Agent for an Index, the Index Sponsor shall be the Index Calculation Agent for such Index. As of the date of these Index Rules, the Index Sponsor has initially designated itself as the Index Calculation Agent for each Index.

##### **3.2 Index Sponsor and Index Calculation Agent standards**

Each of the Index Sponsor and the Index Calculation Agent shall act in good faith and in a commercially reasonable manner in respect of determinations, interpretations and calculations made by it pursuant to the Index Rules.

### **3.3 Index Sponsor and Index Calculation Agent determinations**

All determinations, interpretations and calculations of the Index Sponsor and the Index Calculation Agent relating to the Index Rules shall be final, conclusive and binding and no person shall be entitled to make any claim against the Index Sponsor, the Index Calculation Agent or any Relevant Person in respect thereof. None of the Index Sponsor, the Index Calculation Agent and any Relevant Person shall:

- (a) be under any obligation to revise any determination or calculation made or action taken for any reason in connection with the Index Rules or an Index; or
- (b) have any responsibility to any person (whether as a result of negligence or otherwise) for any determinations made or anything done (or omitted to be determined or done) in respect of an Index or in respect of the publication of any Index Level (or failure to publish any level) or any use to which any person may put an Index or the Index Levels.

### **4. Corrections in respect of an Index**

If:

- (a) the level or price of any Constituent or any variable, input or other parameter that is used for any calculation relevant to the Index Level for any Index Calculation Day is subsequently corrected; or
- (b) the Index Calculation Agent identifies an error or omission in any of its calculations or determinations in respect of the Index Level for any Index Calculation Day,

then the Index Calculation Agent may, if practicable and if it considers such correction material, adjust or correct the Index Level for any relevant Index Calculation Day. The Index Calculation Agent shall publish (in such manner determined by the Index Calculation Agent) corrected Index Level(s) as soon as reasonably practicable.

### **5. Constituent Extraordinary Events**

- (a) For any Constituent,
  - (i) if its level or net asset value is not calculated and is not announced by the Constituent Sponsor for the relevant Constituent, but is calculated and announced by a successor sponsor acceptable to the Index Calculation Agent, or
  - (ii) in the case of a Constituent that is an index, if it is replaced by a successor index using, in the determination of the Index Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of that Constituent, or
  - (iii) in the case of a Constituent that is an exchange-traded fund that has a Reference Index, if it is replaced by a successor exchange-traded fund whose Reference Index is either the same as that of the replaced Constituent or is an index using, in the determination of the Index Calculation Agent, the same or a substantially similar formula for and method of calculation as used in the calculation of the replaced Constituent's Reference Index,

and, in any case, whose sponsor is acceptable to the Index Calculation Agent, then in the case of clause (i), (ii) or (iii) above, that successor Constituent will thereafter be deemed to be the Constituent so calculated and announced by that successor sponsor described in clause (i) above or that successor index or exchange-traded fund described in clause (ii) or (iii) above, as the case may be, with effect from a date determined by the Index Calculation Agent, who may make such adjustments to the Index Rules as it determines in good faith are appropriate to account for such change.

For the avoidance of doubt, the Index Calculation Agent shall not accept a particular successor index or exchange-traded fund if the Index Calculation Agent determines, in its sole discretion, that doing so would immediately result in the occurrence of a Constituent



Extraordinary Event. Upon the acceptance of a successor index or exchange-traded fund, such successor shall take the place of the relevant Constituent.

(b) If a Constituent Extraordinary Event occurs in respect of a Constituent, the Index Calculation Agent, acting in good faith and in a commercially reasonable manner, shall select as a substitute for such Constituent

(x) an exchange-traded fund that has a Reference Index, or

(y) an index,

that, in either case, the Index Calculation Agent determines, in its sole discretion, possesses substantially similar characteristics or provides a substantially similar exposure (as considered prior to the occurrence of such Constituent Extraordinary Event, with the understanding that an exchange-traded fund can be substantially similar to an index and vice versa) as compared to the Constituent that is being replaced (such substitute exchange-traded fund or index being referred to herein as a “**substitute ETF**” or “**substitute index**”, respectively). In such a case, the Index Calculation Agent shall, in good faith, make such adjustments that it determines to be appropriate to any variable, calculation methodology, valuation terms or any other rule in the Index Rules to account for such substitution;

*provided that*, (A) for any Constituent that is not the Bond Constituent, if the Index Calculation Agent determines, in its sole discretion, that no such substitute ETF and no such substitute index is available, then the Index Calculation Agent will replace such Constituent with the Bond Constituent as its substitute and (B) for the Bond Constituent, if the Index Calculation Agent determines, in its sole discretion, that no such substitute ETF and no such substitute index is available, then the Index Calculation Agent shall remove the Bond Constituent from the Constituents, and in the case of either (A) or (B) above, in good faith, make such adjustments as it determines to be appropriate to any variable, calculation methodology or valuation terms or any other rule to account for such substitution or removal.

For the avoidance of doubt, the Index Calculation Agent shall not select a particular substitute ETF or substitute index if the Index Calculation Agent determines, in its sole discretion, that doing so would immediately result in the occurrence of a Constituent Extraordinary Event. Upon the selection of a substitute ETF or substitute index, such substitute shall take the place of the relevant Constituent.

(c) With respect to each Constituent that is an exchange-traded fund (or the relevant successor or substitute ETF), the Index Calculation Agent will make anti-dilution adjustments to the Closing Level of such Constituent only (a) if the shares of such Constituent are subject to a share split or reverse share split, once such split has become effective, or (b) if such Constituent is subject to (i) an issuance of additional shares of such Constituent that is given ratably to all or substantially all holders of shares of such Constituent or (ii) a distribution of shares of such Constituent as a result of the triggering of any provision of the corporate charter of such Constituent, once the dividend or distribution has become effective and the shares of such Constituent are trading ex-dividend. The Index Calculation Agent will be solely responsible for the determination and calculation of any such anti-dilution adjustments and any related determinations and calculations, and its determinations and calculations with respect thereto will be conclusive in the absence of manifest error.

**“Constituent Extraordinary Event”** in respect of a Constituent means:

(a) for any Constituent that is an index, the Constituent Sponsor makes a material change in the formula for or the method of calculating that index or in any other way materially modifies that index (other than a modification prescribed in that formula or method to maintain that index in routine circumstances);

(b) for any Constituent that is an exchange-traded fund that has a Reference Index, the sponsor of the relevant Reference Index makes a material change in the formula for or the method of calculating that Reference Index or in any other way materially modifies that Reference Index (other than a modification prescribed in that formula or method to maintain that Reference Index in routine circumstances);

- (c) for any Constituent that is an exchange-traded fund that has a Reference Index, the sponsor of the relevant Reference Index replaces the Reference Index with a successor index that does not, in the determination of the Index Calculation Agent, use the same or a substantially similar formula for and method of calculation as used in the calculation of the replaced Reference Index;
- (d) for any Constituent that is an exchange-traded fund for which the shares of the relevant exchange-traded fund are issued by a trust (such issuer trust, the “**Trust Issuer**”), the trust agreement or any similar governing document of the Trust Issuer is terminated, or the Trust Issuer becomes, for any reason, subject to termination, liquidation, dissolution or winding-up or any other analogous proceeding;
- (e) for any Constituent, the Constituent Sponsor of such Constituent permanently cancels the Constituent, and no successor exists, or the Constituent’s level or net asset value is not calculated and is not announced by the Constituent Sponsor for the relevant Constituent, and is not calculated and announced by a successor sponsor acceptable to the Index Calculation Agent;
- (f) for any Constituent that is an index, a failure by the Constituent Sponsor of such Constituent to calculate and publish the Closing Level for such index for 5 consecutive Index Business Days;
- (g) a Constituent that is an exchange-traded fund is de-listed from the relevant primary exchange for such Constituent, liquidated or otherwise terminated;
- (h) a Lock-In Event occurs in respect of a Constituent that is an exchange-traded fund;
- (i) for any Constituent, at any time, the license granted (if required) by a non-affiliate of the Index Calculation Agent to the Index Calculation Agent (or its affiliates) to use such Constituent for the relevant Index terminates, or the Index Calculation Agent’s rights to use the Constituent for the relevant Index is otherwise disputed by a non-affiliate of the Index Calculation Agent, impaired or ceases (for any reason); or
- (j) the occurrence or continuation of a Change in Law in respect of any Constituent.

A “**Lock-In Event**” occurs when one or more of the following events occur in respect of a Constituent that is an exchange-traded fund, and the Index Calculation Agent determines in its sole discretion that such event or combination of events is material (although, for the avoidance of doubt, the Index Calculation Agent has no obligation to monitor actively whether or not any of the following events has occurred):

- (a) there is an amendment, variation or modification to the offering documents of any Constituent that is an exchange-traded fund, that, in the reasonable determination of the Index Calculation Agent, would materially adversely affect the ability of market participants to trade in shares of the Constituent;
- (b) the Average Daily Trading Volume of any Constituent that is an exchange-traded fund declines below \$50 million;
- (c) the Market Capitalization of any Constituent that is an exchange-traded fund declines below \$500 million;
- (d) the net asset value of any Constituent that is an exchange-traded fund is not calculated or is not announced by the relevant Constituent Sponsor for 5 consecutive Index Business Days;
- (e) the relevant sponsor of the Reference Index of any Constituent that is an exchange-traded fund fails to calculate and publish the Closing Level for such index for 5 consecutive Index Business Days; or
- (f) the relevant Constituent Sponsor of any Constituent that is an exchange-traded fund suspends creations or redemptions of shares of such Constituent for 5 consecutive Index Business Days or announces a suspension of unlimited duration of such creations or redemptions.

## 6. General Definitions

Capitalized terms defined below shall have the following meanings in the Index Rules:

**“Average Daily Trading Volume”** means, with respect to a Constituent that is an exchange-traded fund and an Index Calculation Day, the product of (a) the average volume of trading in the shares of such Constituent on all exchanges over the preceding 6-month period, as reported by Bloomberg using the function ETF Ticker US HP and selecting a 6-month range or by another information provider selected by the Index Calculation Agent, and (b) the Closing Level of such Constituent on such Index Calculation Day. The Average Daily Trading Volume on August 1, 2014 for each Constituent that is an exchange-traded fund is provided in Schedule 1 to the Index Rules.

**“Bond Constituent”** means the bond exchange-traded fund identified as the Bond Constituent in Table 1 in Section 1 of Part B, or any successor or substitute for that exchange-traded fund.

**“Change in Law”** means, in respect of an Index, on or after the Index Live Date specified in Part C: Index Details, due to (i) the adoption of, or any change in, any applicable law, regulation, order or rule (including, without limitation, any tax law or adoption or promulgation of new regulations authorized or mandated by existing statute) or (ii) the promulgation of, or any change in, the announcement or statement of a formal or informal interpretation, application, exercise or operation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law, regulation, order or rule (including, without limitation, rules or regulations promulgated or implemented by the U.S. Commodity Futures Trading Commission, the U.S. Securities and Exchange Commission or any exchange or trading facility), in the case of (i) or (ii) the Index Calculation Agent determines that (x) it is contrary to such law, regulation, order or rule for any market participants that are brokers or financial intermediaries (individually or collectively) to hold, acquire or dispose of (in whole or in part) any financial asset, transaction or interest in or relating to a Constituent or any component of a Constituent or (y) holding a position in any financial asset, transaction or interest in or relating to a Constituent or any component of a Constituent is (or, but for the consequent disposal or termination thereof, would otherwise be) in excess of any allowable position limit(s) applicable to any market participants that are brokers or financial intermediaries (individually or collectively) under any such law, regulation, order or rule.

**“Constituent”** means each U.S. Sector Constituent and the Bond Constituent (collectively, the **“Constituents”**).

**“Constituent Extraordinary Event”** has the meaning given in Section 5 of this Part A: General Rules.

**“Constituent Sponsor”** means, in respect of each Constituent, the sponsor of such Constituent or a successor sponsor of such Constituent that is acceptable to the Index Calculation Agent.

**“Index”** has the meaning given in the introduction to the rules: “JPMorgan U.S. Sector Rotator Series X Index Series – Index Rules”.

**“Index Calculation Days”** means the days specified as such in Part C: Index Details.

**“Index Calculation Agent”** has the meaning given in Section 3.1 of this Part A: General Rules.

**“Index Level”** means, in respect of an Index, the level of such Index, as defined and calculated in accordance with Part B: Index Algorithm.

**“Index Sponsor”** has the meaning given in Section 1.1 of this Part A: General Rules.

**“Index Rules”** has the meaning given in the introduction to the rules: “JPMorgan U.S. Sector Rotator Series X Index Series – Index Rules”.

**“Lock-in Event”** has the meaning given in Section 5 of this Part A: General Rules.

**"Market Capitalization"** means, with respect to a Constituent that is an exchange-traded fund and an Index Calculation Day, the market capitalization of such Constituent, as provided by Bloomberg on the "DES" page or by another information provider selected by the Index Calculation Agent for such Constituent, on such Index Calculation Day. The Market Capitalization on August 1, 2014 for each Constituent that is an exchange-traded fund is provided in Schedule 1 to Part B of the Index Rules.

**"Reference Index"** means with respect to a Constituent that is an exchange-traded fund, the index such Constituent references.

**"Relevant Person"** has the meaning given in the "Notices, Disclaimers and Conflicts Disclosures" section of the Index Rules.

**"Trust Issuer"** has the meaning given in Section 5 of this Part A: General Rules.

**"U.S. Sector Constituent"** means each of the U.S. sector exchange-traded funds identified as a U.S. Sector Constituent in Table 1 in Section 1 of Part B, or any successor or substitute for any such exchange-traded fund.

## PART B

### Index Algorithm

#### 1. Constituents

The Constituents of each Index as of August 18, 2014 are set out in Table 1 below. Table 1 also indicates whether a Constituent is a U.S. Sector Constituent or the Bond Constituent, contains the Bloomberg ticker for each Constituent for ease of identification, and specifies the Primary Exchange and Related Exchange for each Constituent, if applicable.

**Table 1**

<i>i</i>	Constituent Name	U.S. Sector Constituent or Bond Constituent	Bloomberg Ticker	Primary Exchange	Related Exchange
1	The Consumer Discretionary Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLY	NYSE Arca	All Exchanges
2	The Consumer Staples Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLP	NYSE Arca	All Exchanges
3	The Energy Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLE	NYSE Arca	All Exchanges
4	The Financial Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLF	NYSE Arca	All Exchanges
5	The Health Care Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLV	NYSE Arca	All Exchanges
6	The Industrial Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLI	NYSE Arca	All Exchanges
7	The Utilities Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLU	NYSE Arca	All Exchanges
8	The Materials Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLB	NYSE Arca	All Exchanges
9	The Technology Select Sector SPDR <sup>®</sup> Fund	U.S. Sector Constituent	XLK	NYSE Arca	All Exchanges
10	The Dow Jones REIT SPDR <sup>®</sup> Fund	U.S. Sector Constituent	RWR	NYSE Arca	All Exchanges
11	iShares <sup>®</sup> 1-3 Year Treasury Bond ETF	Bond Constituent	SHY	NYSE Arca	All Exchanges

#### 2. Index Levels

##### 2.1 Index Base Date and Index Base Level

The Index Base Date and Index Base Level for each Index is as specified in Part C: Index Details.

##### 2.2 Calculation of Index Levels

Subject to Section 3 of this Part B: Index Algorithm (Market Disruption Events), the Index Calculation Agent shall calculate the Index Level for each Index Calculation Day in accordance with this Section 2.2. The Index Calculation Agent shall publish the Index Level to an accuracy of two decimal places for each Index Calculation Day.

On the Index Base Date, the Index Level will be equal to the Index Base Level. On each subsequent Index Calculation Day<sub>t</sub>, the Index Calculation Agent shall calculate and publish the Index Level (**Index Level<sub>t</sub>**) in accordance with the following formula:

$$IndexLevel_t = IndexLevel_k \times \left( 1 + Return_{k,t} - \left( AF \times \frac{Days_{k,t}}{360} \right) \right)$$

Where:

Index Level <sub>t</sub>	means the Index Level for Index Calculation Day <sub>t</sub>
Index Level <sub>k</sub>	means the Index Level for Index Rebalancing Day <sub>k</sub>
Index Rebalancing Day <sub>k</sub>	means the Index Rebalancing Day immediately preceding Index Calculation Day <sub>t</sub> (whether or not Index Calculation Day <sub>t</sub> is itself an Index Rebalancing Day)
AF	means the Adjustment Factor
Days <sub>k,t</sub>	means the number of calendar days from, but excluding, Index Rebalancing Day <sub>k</sub> to, and including, Index Calculation Day <sub>t</sub>

$$Return_{k,t} = \sum_{i=1}^{11} \left( w\_fin_k^i \times \left( \frac{ClosingTRLevel_t^i}{ClosingTRLevel_k^i} - 1 \right) \right)$$

where:

$ClosingTRLevel_k^i$	means the Closing TR Level of Constituent i for Index Rebalancing Day <sub>k</sub>
$ClosingTRLevel_t^i$	means the Closing TR Level of Constituent i for Index Calculation Day <sub>t</sub>
$w\_fin_k^i$	means the final weight for Constituent i for Index Rebalancing Day <sub>k</sub> , as determined in accordance with Step 3 of Section 2.5 of this Part B

### 2.3 Calculation of Closing TR Level for each Constituent

With respect to each Constituent, the Closing TR Level means the Closing Level of that Constituent, with dividends re-invested if that Constituent is an exchange-traded fund. For an Index Calculation Day that is a Disrupted Day for a Constituent, the Closing TR Level for that Constituent in respect of such Index Calculation Day shall equal the Closing TR Level for that Constituent for the immediately preceding Index Calculation Day that was not a Disrupted Day for that Constituent. For an Index Calculation Day that is not a Disrupted Day for a Constituent, the Closing TR Level for that Constituent in respect of such Index Calculation Day shall be calculated as follows for such Index Calculation Day<sub>t</sub>:

$$ClosingTRLevel_t^i = ClosingTRLevel_{t-1}^i \times \left( \frac{S_t^i + d_t^i}{S_{t-1}^i} \right)$$

where:

$ClosingTRLevel_t^i$  means the Closing TR Level of Constituent i for Index Calculation Day<sub>t</sub>

$ClosingTRLevel_{t-1}^i$  means the Closing TR Level of Constituent i for Index Calculation Day<sub>t-1</sub>

$S_t^i$  means the Closing Level of Constituent i for Index Calculation Day<sub>t</sub>

$S_{t-1}^i$  means the Closing Level of Constituent i for Index Calculation Day<sub>t-1</sub>

$d_t^i$  means

(a) if Constituent i is an exchange-traded fund and Index Calculation Day<sub>t</sub> is an Ex-Dividend Date for Constituent i, the Gross Dividend Amount of Constituent i in respect of such Ex-Dividend Date, and

(b) otherwise, 0

Index Calculation Day<sub>t-1</sub> means the Index Calculation Day immediately preceding Index Calculation Day<sub>t</sub> (whether or not such day is a Disrupted Day for Constituent i)

For purposes of determining the Closing TR Level for a Constituent for any Index Calculation Day that is not a Disrupted Day, if the immediately preceding Index Calculation Day ("**Prior Index Calculation Day**") was a Disrupted Day for such Constituent then, in the formula for determining the Closing TR Level for such Index Calculation Day, (i) the Closing TR Level for that Prior Index Calculation Day shall be replaced with the Closing TR Level on the immediately preceding Index Calculation Day that was not a Disrupted Day (the "**Prior Non-Disrupted Index Calculation Day**") for such Constituent, (ii) the Closing Level for that Prior Index Calculation Day shall be replaced with the Closing Level on the Prior Non-Disrupted Index Calculation Day for such Constituent and (iii) if such Constituent is an exchange-traded fund, the Gross Dividend Amount of such Constituent in respect of such Index Calculation Day shall be replaced with the sum of the Gross Dividend Amounts of such Constituent in respect of all days from and excluding the Prior Non-Disrupted Index Calculation Day to and including such Index Calculation Day.

## 2.4 Calculation of the realized volatility of each U.S. Sector Constituent

In respect of each Index Rebalancing Day<sub>k</sub>, the realized volatility of each Constituent *i* that is a U.S. Sector Constituent shall be calculated in accordance with the following formula:

$$Vol_k^i = \sqrt{\frac{\sum_{t=Index\ Re\ balancing\ Day_{k-22}}^{Index\ Re\ balancing\ Day_{k-1}} (Daily\ Return_t^i)^2}{22}} \times 252$$

where:

*Index Rebalancing Day<sub>k-n</sub>* means for every integer *n* from and including 1 to and including 22, the *n*<sup>th</sup> Index Calculation Day preceding Index Rebalancing Day<sub>k</sub>

*Daily Return<sub>t</sub><sup>i</sup>* means the return of such Constituent *i* from Index Calculation Day<sub>t-1</sub> to Index Calculation Day<sub>t</sub> which is equal to:

$$\ln\left(\frac{ClosingTRLevel_t^i}{ClosingTRLevel_{t-1}^i}\right)$$

where:

*ClosingTRLevel<sub>t</sub><sup>i</sup>* means the Closing TR Level of Constituent *i* for Index Calculation Day<sub>t</sub>

*ClosingTRLevel<sub>t-1</sub><sup>i</sup>* means the Closing TR Level of Constituent *i* for Index Calculation Day<sub>t-1</sub>

Index Calculation Day<sub>t-1</sub> means the Index Calculation Day immediately preceding Index Calculation Day<sub>t</sub> (whether or not such day was a Disrupted Day for Constituent *i*)

ln means the natural logarithm function

## 2.5 Calculation of the weight of each Constituent

On the Index Base Date (**Index Rebalancing Day<sub>0</sub>**), each Index is composed of notional holdings in each of the Constituents with Base Weights as specified in the relevant portion of Part C: Index Details for that Index.

In respect of each Index Rebalancing Day<sub>k</sub>, the weight of each Constituent *i* shall be calculated in accordance with the following three steps:

### **Step 1:**

Pursuant to Step 1, the Index Calculation Agent determines, in respect of Rebalancing Day<sub>k</sub>, (1) which of the U.S Sector Constituents will have a positive preliminary weight (and, for each of those U.S. Sector Constituents, what the relevant preliminary weight will be) and which of the U.S Sector Constituents will have a zero preliminary weight and (2) whether the Bond



Constituent will have a positive preliminary weight (and, in such case, what the relevant preliminary weight will be) or a zero preliminary weight in accordance with the following formulas:

$$\begin{cases} w\_pre_k^i = Selected_k^i \times 20\% & i < 11 \\ w\_pre_k^{11} = 100\% - \sum_{i=1}^{10} w\_pre_k^i \end{cases}$$

where:

*Selected<sub>k</sub><sup>i</sup>* means for Constituents 1 to 10, for Index Rebalancing Day<sub>k</sub>, (a) 1.0 if *Return<sub>j</sub><sup>i</sup>*, as defined below in respect of Index Selection Day<sub>j</sub> for Index Rebalancing Day<sub>k</sub>, for such Constituent i is positive and is also one of the five largest positive returns for Constituents 1 to 10, where Index Selection Day<sub>j</sub> is the Index Calculation Day immediately preceding Index Rebalancing Day<sub>k</sub>, or (b) 0.0 if the criteria in (a) are not met

*Return<sub>j</sub><sup>i</sup>* means the return of Constituent i from Index Rebalancing Day<sub>k-1</sub> to Index Selection Day<sub>j</sub>, which is equal to:

$$\frac{ClosingTRLevel_j^i}{ClosingTRLevel_{k-1}^i} - 1$$

where:

*ClosingTRLevel<sub>j</sub><sup>i</sup>* means the Closing TR Level of Constituent i for Index Selection Day<sub>j</sub>

*ClosingTRLevel<sub>k-1</sub><sup>i</sup>* means the Closing TR Level of Constituent i for Index Rebalancing Day<sub>k-1</sub>

Index Selection Day<sub>j</sub> means, for Index Rebalancing Day<sub>k</sub>, the Index Calculation Day immediately preceding Index Rebalancing Day<sub>k</sub>

Index Rebalancing Day<sub>k-1</sub> means the Index Rebalancing Day immediately preceding Index Rebalancing Day<sub>k</sub>

## **Step 2:**

Pursuant to Step 2, the Index Calculation Agent determines, in respect of Rebalancing Day<sub>k</sub>, an adjusted weight for each of the U.S Sector Constituents that has a positive preliminary weight as determined in accordance with Step 1 of this Section 2.5 in order to equalize the volatility contribution of each such U.S. Sector Constituent (based on realized volatility) in accordance with the following formula:

$$w\_adjusted_k^i = \frac{\sum_{i=1}^{10} w\_pre_k^i}{Vol_k^i \times A} \quad i < 11$$

Where:

$Vol_k^i$  means the realized volatility of Constituent i in respect of Index Rebalancing Day<sub>k</sub> as determined in accordance with Section 2.4 of this Part B

$A$  means:  $\sum_{i=1}^{10} \frac{Selected_k^i}{Vol_k^i}$

$Selected_k^i$  means for Constituents 1 to 10, for Index Rebalancing Day<sub>k</sub>, the value as determined in accordance with Step 1 of this Section 2.5

### **Step 3:**

Pursuant to Step 3, the Index Calculation Agent determines, in respect of Rebalancing Day<sub>k</sub>, (1) a final weight for each U.S. Sector Constituent based on that U.S. Sector Constituent's adjusted weight as determined in accordance with Step 2 of this Section 2.5 and (2) a final weight for the Bond Constituent based on the sum of the final weights for all of the U.S. Sector Constituents determined in accordance with this Step 3 of this Section 2.5, in each case in accordance with the following formulas:

If AggregateRealized is greater than AggVolCap:

$$\left\{ \begin{array}{l} w\_fin_k^i = w\_adjusted_k^i \times \frac{AggCapVol}{AggregateRealized} \quad i < 11 \\ w\_fin_k^{11} = 100\% - \sum_{i=1}^{10} w\_fin_k^i \end{array} \right.$$

Where:

AggVolCap means the aggregate volatility cap for realized volatility specified for the relevant Index in Part C: Index Details

AggregateRealized means an amount calculated in accordance with the following formula:

$$AggregateRealized = \sum_{i=1}^{10} w\_adjusted_k^i \times Vol_k^i$$

If the AggregateRealized is less than or equal to AggVolCap:

$$\begin{cases} w\_fin_k^i = w\_adjusted_k^i & i < 11 \\ w\_fin_k^{11} = w\_pre_k^{11} \end{cases}$$

Where:

AggVolCap means the aggregate volatility cap for realized volatility specified for the relevant Index in Part C: Index Details

AggregateRealized means an amount calculated in accordance with the following formula:

$$AggregateRealized = \sum_{i=1}^{10} w\_adjusted_k^i \times Vol_k^i$$

### 3. Market Disruption Events

#### 3.1 On an Index Calculation Day

If, for the purpose of determining the Index Level, any Index Calculation Day (other than an Index Rebalancing Day) is a Disrupted Day for any Constituent (such Constituent for these purposes, a “**Disrupted Constituent**”), then the Index Calculation Agent may either:

- (a) calculate and publish its good faith estimate of the Index Level for such Index Calculation Day, using its good faith estimate of the closing level of the Disrupted Constituent and the Closing Level for any Constituent not affected by a Market Disruption Event on such day. Any such estimated Index Level may be subject to correction once the Disrupted Constituent is no longer affected by the occurrence of a Disrupted Day (and any such correction will be published by the Index Calculation Agent as soon as reasonably practicable); or
- (b) suspend the calculation and publication of the Index Level until no later than the first following Index Calculation Day that is not a Disrupted Day for any of the Constituents.

#### 3.2 On an Index Rebalancing Day

If any scheduled Index Rebalancing Day is a Disrupted Day for any Constituent, then the relevant Index Rebalancing Day shall be the first following Index Calculation Day that is not a Disrupted Day for any of the Constituents, unless each of the eight Index Calculation Days immediately following the day originally scheduled to be the Index Rebalancing Day is a Disrupted Day for one or more Constituents, in which case such eighth Index Calculation Day following the day originally scheduled to be the relevant Index Rebalancing Day shall be the relevant Index Rebalancing Day (notwithstanding that it is a Disrupted Day in respect of at least one Constituent), and on such eighth Index Calculation Day, the Index Calculation Agent shall (A) determine the weight of each Constituent *i* using the formula set forth in Section 2.4 of this Part B of the Index Rules and (B) calculate and publish its good faith estimate of the Index Level for such rescheduled Index Rebalancing Day, using, for the purposes of both 3.2(A) and (B), the Closing Level of any Constituent on such rescheduled Index Rebalancing Day for any Constituent not affected by a Market Disruption Event on such day and its good faith estimate of the closing level of any Constituent affected by a Market Disruption Event on such rescheduled Index Rebalancing Day.

#### 3.3 Market Disruption Event Definitions

A “**Market Disruption Event**” occurs if the Index Calculation Agent determines in its sole discretion that on any Index Calculation Day there has been:

(i) in respect of any Constituent that is an index or any Reference Index of any Constituent that is an exchange-traded fund that has a Reference Index, a failure by the relevant sponsor to calculate and publish the Closing Level for such index on such Index Calculation Day, or any event that, in the determination of the Index Calculation Agent, disrupts or impairs the ability of market participants generally to effect transactions in or obtain market values for any securities or components that compose the relevant index, any options on instruments related to such securities or components, or relevant futures related to such securities or components, if such disruption or impairment relates to securities or components and related options or futures on the same or additional securities or components which securities and components in the aggregate compose 20% or more of the level of the relevant index; or

(ii) in respect of any Constituent that is an equity index (including, for the avoidance of doubt, an index composed of preferred stocks or interests in REITS) or any Reference Index of any Constituent that is an exchange-traded fund with a Reference Index that is an equity index (including, for the avoidance of doubt, an index composed of preferred stocks or interests in REITS), an Equity Index Disruption Event; or

(iii) in respect of a Constituent that is an exchange-traded fund, an ETF Disruption Event; and

the Index Calculation Agent determines in its sole discretion that the applicable event described above could materially interfere with the ability of market participants to transact in positions with respect to an Index, any Constituent or the Reference Index of any Constituent that is an exchange-traded fund.

For the purpose of determining whether a Market Disruption Event with respect to an index and an Index Calculation Day exists at any time, if trading in a security or component included in the applicable index is materially suspended or materially limited at that time, then the relevant percentage contribution of that security to the level of the applicable index will be based on a comparison of (x) the portion of the level of the applicable index attributable to that security relative to (y) the overall level of the applicable index, in each case immediately before that suspension or limitation.

**“Equity Index Disruption Event”** means, in each case as determined by the Index Calculation Agent in its sole discretion:

(i) the occurrence or existence of a suspension, absence or material limitation of trading of securities then constituting 20% or more of the level of the equity index (including, for the avoidance of doubt, an index composed of preferred stocks or interests in REITS) on the relevant primary exchanges for such securities for more than two hours of trading during, or during the last one-half hour period preceding the close of, the principal trading session on such relevant primary exchanges; or

(ii) if applicable, the occurrence or existence of a suspension, absence or material limitation of trading on the primary exchange or market for trading in futures or options contracts related to the equity index (including, for the avoidance of doubt, an index composed of preferred stocks or interests in REITS) for more than two hours of trading during, or during the last one-half hour period preceding the close of, the principal trading session on such applicable exchange or market.

**“ETF Disruption Event”** means, in respect of each Constituent that is an exchange-traded fund, in each case as determined by the Index Calculation Agent in its sole discretion:

(i) the occurrence or existence of a suspension, absence or material limitation of trading of the shares of such Constituent on the relevant primary exchange for such shares for more than two hours of trading during, or during the last one-half hour period preceding the close of, the principal trading session on such relevant primary exchange;

- (ii) a breakdown or failure in the price and trade reporting systems of the relevant primary exchange for the shares of such Constituent as a result of which the reported trading prices for such shares are materially inaccurate for more than two hours of trading during, or during the last one-half hour period preceding the close of, the principal trading session on such relevant primary exchange;
- (iii) if applicable, the occurrence or existence of a suspension, absence or material limitation of trading on the primary exchange or market for trading in futures or options contracts related to the shares of such Constituent or on any Related Exchange for such Constituent for more than two hours of trading during, or during the last one-half hour period preceding the close of, the principal trading session on the applicable exchange or market;
- (iv) the net asset value of such Constituent is not calculated or is not announced by the Constituent Sponsor; or
- (v) the Constituent Sponsor of such Constituent suspends creations or redemptions of shares of such Constituent.

For the purpose of determining whether an Equity Index Disruption Event or an ETF Disruption Event has occurred:

- (i) a limitation on the hours or number of days of trading will not constitute an Equity Index Disruption Event or an ETF Disruption Event if it results from an announced change in the regular business hours of the relevant primary exchange or the primary exchange or market for trading in futures or options contracts related to the relevant shares;
- (ii) limitations pursuant to the rules of any relevant primary exchange similar to New York Stock Exchange Rule 80B (or any applicable rule or regulation enacted or promulgated by any other self-regulatory organization or any government agency of scope similar to New York Stock Exchange Rule 80B as determined by the Index Calculation Agent) on trading during significant market fluctuations will constitute a suspension, absence or material limitation of trading;
- (iii) a suspension of trading in futures or options contracts on the applicable equity index (including, for the avoidance of doubt, an index composed of preferred stocks or interests in REITS) or shares of a Constituent that is an exchange-traded fund by the primary exchange or market for trading in such contracts or shares by reason of (a) a price change exceeding limits set by such exchange or market, (b) an imbalance of orders relating to such contracts or shares or (c) a disparity in bid and ask quotes relating to such contracts or shares, will constitute a suspension, absence or material limitation of trading in futures or options contracts related to such equity index or the shares of such Constituent; and
- (iv) a suspension, absence or material limitation of trading on any relevant primary exchange or, if applicable, on the primary exchange or market on which futures or options contracts related to the applicable equity index (including, for the avoidance of doubt, an index composed of preferred stocks or interests in REITS) or the shares of a Constituent that is an exchange-traded fund are traded will not include any time when such exchange or market is itself closed for trading under ordinary circumstances.

#### 4. Definitions

Capitalized terms defined below shall have the following meanings in the Index Rules:

**“Adjustment Factor”** means the adjustment factor specified for the relevant Index in Part C: Index Details.

**“Base Weight”** means the weights for each Constituent specified for the relevant Index in Part C: Index Details.

**“Closing Level”** means, subject to the provisions of Section 5 of Part A: General Rules of the Index Rules (Constituent Extraordinary Events) and Section 3 of this Part B: Index Algorithm (Market Disruption Events), (i) in respect of a Constituent that is an index, the official closing level of the relevant Constituent published by the Constituent Sponsor for the relevant day and (ii) in respect of a Constituent that is an exchange-traded fund, the official closing price of the regular trading session for the relevant day on the Primary Exchange of such Constituent.

**“Disrupted Constituent”** has the meaning given in Section 3 of this Part B: Index Algorithm.

**“Disrupted Day”** means, in respect of a Constituent, an Index Calculation Day on which (i) a Market Disruption Event occurs or exists in respect of such Constituent or (ii) the Primary Exchange or Related Exchange (as the case may be) in respect of such Constituent fails to open for trading during its regular trading session.

**“Equity Index Disruption Event”** has the meaning given in Section 3.3 (Market Disruption Event Definitions) of this Part B: Index Algorithm.

**“ETF Disruption Event”** has the meaning given in Section 3.3 (Market Disruption Event Definitions) of this Part B: Index Algorithm.

**“Ex-Dividend Date”** means, with respect to a dividend or other distribution for a Constituent that is an exchange-traded fund, the first trading day on which transactions in the shares of such Constituent trade on the relevant primary exchange without the right to receive that dividend or other distribution.

**“Gross Dividend Amount”** means, in respect of a Constituent that is an exchange-traded fund and an Ex-Dividend Date for such Constituent, 100% of the amount of any dividend or other distribution per share of such Constituent that a shareholder in such Constituent on that Ex-Dividend Date would no longer have the right to receive due to the occurrence of such Ex-Dividend Date, as determined by the Index Calculation Agent in its sole discretion as the sum of (x) the amount of any cash dividend paid or other cash distribution made and (y) the fair market value of any distribution of shares of capital stock, evidences of indebtedness or other assets or property of such Constituent (other than share dividends or distributions referred to in subsection (c) of Section 5 (Constituent Extraordinary Events) in Part A: General Rules). If a portion of such distribution consists of property traded on the Ex-Dividend Date on a U.S. national securities exchange, the fair market value of such portion will equal the closing price of such distributed property on such Ex-Dividend Date.

**“Index Base Date”** means the date specified for the relevant Index in Part C: Index Details.

**“Index Base Level”** means the Index Level specified for the relevant Index in Part C: Index Details.

**“Index Currency”** means the currency specified for the relevant Index in Part C: Index Details.

**“Index Live Date”** means the date specified for the relevant Index in Part C: Index Details.

**“Index Live Level”** means the Index Level specified for the relevant Index in Part C: Index Details.

**“Index Rebalancing Day”** means the days specified for the relevant Index in Part C: Index Details.

**“Index Selection Day”** means the days specified for the relevant Index in Part C: Index Details.

**“Market Disruption Event”** has the meaning given in Section 3.3 (Market Disruption Event Definitions) of this Part B: Index Algorithm.

**“Primary Exchange”** means, in respect of a Constituent, the principal U.S. securities exchange registered under the Securities Exchange Act of 1934, as amended, on which such Constituent is listed or admitted to trading. The Primary Exchange for each Constituent on August 1, 2014 is specified in Table 1 in Section 1 (Constituents) of this Part B: Index Algorithm.

**“Related Exchange”** means, in respect of a Constituent that is an exchange-traded fund, each exchange or quotation system, if any, specified as such in Table 1 in Section 1 (Constituents), any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in futures or options contracts relating to any such Constituent has

temporarily relocated (provided that the Index Calculation Agent has determined that there is comparable liquidity relative to the futures or options contracts relating to such Constituent on such temporary substitute exchange or quotation system as on the original Related Exchange), provided, however, that where “All Exchanges” is specified as the Related Exchange, “Related Exchange” shall mean each exchange or quotation system (as determined by the Index Calculation Agent) where trading has a material effect (as determined by the Index Calculation Agent) on the overall market for futures or options contracts relating to such Constituent.

**“Aggregate Volatility Cap”** means the aggregate volatility cap specified for the relevant Index in Part C: Index Details.

**Schedule 1:****Average Daily Trading Volume and Market Capitalization on August 18, 2014****Table A.**

	<b>Constituent Name</b>	<b>Bloomberg Ticker</b>	<b>Average Daily Trading Volume on August 18, 2014 (\$MM*)</b>	<b>Market Capitalization on August 18, 2014 (\$MM*)</b>
1	The Consumer Discretionary Select Sector SPDR <sup>®</sup> Fund	XLY	496	6,767
2	The Consumer Staples Select Sector SPDR <sup>®</sup> Fund	XLP	361	6,816
3	The Energy Select Sector SPDR <sup>®</sup> Fund	XLE	975	11,553
4	The Financial Select Sector SPDR <sup>®</sup> Fund	XLF	679	17,354
5	The Health Care Select Sector SPDR <sup>®</sup> Fund	XLV	424	10,655
6	The Industrial Select Sector SPDR <sup>®</sup> Fund	XLI	589	8,242
7	The Utilities Select Sector SPDR <sup>®</sup> Fund	XLU	489	5,696
8	The Materials Select Sector SPDR <sup>®</sup> Fund	XLB	232	5,673
9	The Technology Select Sector SPDR <sup>®</sup> Fund	XLK	289	13,728
10	The Dow Jones REIT SPDR <sup>®</sup> Fund	RWR	19	2,760
11	iShares <sup>®</sup> 1-3 Year Treasury Bond ETF	SHY	154	9,146

\* Numbers have been rounded to the nearest \$1 MM



## PART C1 – Index Details

### JPMorgan U.S. Sector Rotator TR Series X Index

The table immediately below sets out the specific information pertaining to the JPMorgan U.S. Sector Rotator TR Series X Index.

<b>Name of the Index</b>	J.P. Morgan U.S. Sector Rotator TR Series X Index
<b>Bloomberg Ticker</b>	JPUSSCTO Index
<b>Index Currency</b>	United States Dollar (USD)
<b>Index Base Date</b>	October 31, 2002
<b>Index Base Level</b>	100.00
<b>Index Live Date</b>	August 18, 2014
<b>Index Live Level</b>	338.37
<b>Aggregate Volatility Cap</b>	20%
<b>Adjustment Factor</b>	0.0%
<b>Index Calculation Day(s)</b>	each day on which the New York Stock Exchange is scheduled to be open for trading for its regular trading session
<b>Index Rebalancing Day(s)</b>	Subject to Section 3 of Part B: Index Algorithm ( <i>Market Disruption Events</i> ), the last Index Calculation Day of a calendar month
<b>Index Selection Day(s)</b>	The Index Calculation Day immediately preceding the relevant Index Rebalancing Day

**Table A. Base Weights.**

	<b>Constituent Name</b>	<b>Bloomberg Ticker</b>	<b>Base Weight of each Constituent</b>
1	The Consumer Discretionary Select Sector SPDR <sup>®</sup> Fund	XLY	0.00%
2	The Consumer Staples Select Sector SPDR <sup>®</sup> Fund	XLP	0.00%
3	The Energy Select Sector SPDR <sup>®</sup> Fund	XLE	13.33%
4	The Financial Select Sector SPDR <sup>®</sup> Fund	XLF	7.89%
5	The Health Care Select Sector SPDR <sup>®</sup> Fund	XLV	22.42%
6	The Industrial Select Sector SPDR <sup>®</sup> Fund	XLI	0.00%
7	The Utilities Select Sector SPDR <sup>®</sup> Fund	XLU	0.00%
8	The Materials Select Sector SPDR <sup>®</sup> Fund	XLB	19.48%
9	The Technology Select Sector	XLK	6.95%

	SPDR <sup>®</sup> Fund		
10	The Dow Jones REIT SPDR <sup>®</sup> Fund	RWR	0.00%
11	iShares <sup>®</sup> 1-3 Year Treasury Bond ETF	SHY	29.92%

**SEC LEGEND**

JPMorgan Chase & Co. (“**J.P. Morgan**”) has filed a registration statement (including a prospectus) with the Securities and Exchange Commission (the “**SEC**”) for any offerings to which these materials relate. Before you invest in any offering of securities by J.P. Morgan, you should read the prospectus in that registration statement, the prospectus supplement, as well as the particular product supplement, the relevant term sheet or pricing supplement, and any other documents that J.P. Morgan will file with the SEC relating to such offering for more complete information about J.P. Morgan and the offering of any securities. You may get these documents without cost by visiting EDGAR on the SEC Website at [www.sec.gov](http://www.sec.gov). Alternatively, J.P. Morgan, any agent, or any dealer participating in the particular offering will arrange to send you the prospectus and the prospectus supplement, as well as any product supplement and term sheet or pricing supplement, if you so request by calling toll-free (866) 535-9248.

*Free Writing Prospectus filed pursuant to Rule 433: Registration Statement No. 333-177923*

October 21, 2014