



## Frequently Asked Questions on Leveraged and Inverse Products

This FAQ is prepared by the Investment Products Division and aims to provide basic information to market practitioners in respect of leveraged and inverse products (L&I Products), which are subject to the SFC Handbook for Unit Trusts and Mutual Funds, Investment-Linked Assurance Schemes and Unlisted Structured Investment Products (the “Handbook”), including the Code on Unit Trusts and Mutual Funds (“UT Code”). Applicants are encouraged to contact the relevant case team in the Investment Products Division of the Securities and Futures Commission (the “SFC”) if in doubt on any specific issues arising from the application/interpretation of the Handbook or this FAQ. Please note that each application for authorization is considered on a case-by-case basis.

The information set out below is not meant to be exhaustive. This FAQ may be updated and revised from time to time. This FAQ is only for general reference. Compliance with all the requirements in this FAQ does not necessarily mean an application will be accepted or authorization will be granted. The SFC reserves the rights to exercise all powers conferred under the law.

*Note: For ease of reference, collective investment schemes that are generally known as unit trusts or mutual funds are referred to as “funds” in the following FAQ.*

	Question	Answer
<b>Authorization of L&amp;I Products</b>		
1.	Can an L&I Product be established as a sub-fund under an existing umbrella fund that contains other SFC-authorized unlisted funds or exchange traded funds (ETFs)?	<p>As explained in FAQ4 on the UT Code, in general, we expect sub-funds in the same umbrella fund should share similar investment objectives and risk profiles.</p> <p>Given that L&amp;I Products have different risk profiles from unlisted funds and conventional ETFs and are required to adopt a different naming convention, we do not expect L&amp;I Products to be established under the same umbrella fund as other SFC-authorized unlisted funds and ETFs. L&amp;I Products adopting different replication strategies (e.g. swap-based or futures-based) may be established under</p>

	Question	Answer
		the same umbrella fund.
2.	What are the factors that the SFC may take into account when assessing the acceptability of the management company of futures-based L&I Products?	<p>In the event that the L&amp;I Products seeking SFC authorization adopt futures-based replication structures, the management company must meet the specialist expertise requirement under 8.4A(i) of the UT Code applicable to futures and options funds (Specialist Requirement), which provides that the management company (and, if applicable, the investment adviser) must satisfy the Commission that it has specific experience in the field of futures and options. 8.4A(i) of the UT Code further sets out in more detail the kind of information to be submitted to the SFC for consideration in complying with this provision.</p> <p>In determining whether or not a management company meets the Specialist Requirement, the SFC may also consider the qualifications and experience of the persons employed by the management company or the investment adviser where the latter has been delegated the investment management function (Delegate). It is expected that the management company or the Delegate has to employ staff that has substantive and satisfactory experience (for example, over two to three years' recent experience) in managing either:</p> <ul style="list-style-type: none"> <li>• futures funds that are offered to the public; or</li> <li>• public funds that use futures extensively for investments purposes.</li> </ul> <p>Where a Delegate is appointed, it is also expected that:</p> <ul style="list-style-type: none"> <li>• the delegation arrangement should have a minimum duration of two years; and</li> <li>• the management company has to put in a place a detailed plan in acquiring specialist expertise in managing futures-based L&amp;I Products for the two-year period during which the investment management functions are delegated to the SFC's satisfaction.</li> </ul> <p>For the avoidance of doubt, where the management company engages an</p>

	Question	Answer
		<p>investment adviser purely for advisory purposes without delegating the investment management functions, the management company would be required to meet the Specialist Requirement.</p> <p>The considerations above would be equally applicable in determining whether or not the management company of a futures and options fund meet the Specialist Requirement under 8.4A(i) of the UT Code.</p>
3.	<p>Does the SFC require the names of swap-based L&amp;I Products to include an annotation? If so, what should the annotation be?</p>	<p>To allow investors to easily identify synthetic L&amp;I Products from other investment products before making any investment decision, swap-based L&amp;I Product providers are required to put an asterisk (*) and an annotation in English “(*This is a synthetic product)” and in Chinese “(*此產品為一隻合成產品)”, as the case may be, right after the name of a swap-based L&amp;I Product whenever it appears in offering documents and marketing materials for a swap-based L&amp;I Product issued by the provider or on the provider’s behalf to investors in Hong Kong.</p> <p>This requirement will also be applicable to all notices and other communications with Hong Kong investors in respect of swap-based L&amp;I Products whenever the name of the swap-based L&amp;I Product is mentioned, including information on the corporate websites for Hong Kong investors run by or on behalf of swap-based L&amp;I Products’ providers.</p>
<b>Disclosure</b>		
4.	<p>Does the SFC require information relating to how an L&amp;I Product would perform under different market conditions to be disclosed in the offering documents?</p>	<p>The offering documents of L&amp;I Products should contain disclosure to illustrate that the performance of L&amp;I Products, when held overnight, may deviate from the underlying indices.</p> <p>To illustrate how the performance of the L&amp;I Products may deviate from the underlying indices, the offering documents should include examples to illustrate the performance of L&amp;I Products and the underlying indices under different market conditions, the associated risks and the impact on investors. At a minimum, the following market conditions should be used for the illustration:</p>

	Question	Answer
		(i) in an upward trending market; (ii) in a downward trending market; and (iii) in a volatile market.
5.	What information is required to be displayed in the performance simulator to be made available by the provider of an L&I Product?	Reference is made to the SFC Circular on L&I Products issued on 5 February 2016 which requires the provider of an L&I Product to make available a “performance simulator”, which allows investors to select a historical time period and simulate the performance of the L&I Product during that period based on historical data.  The performance simulator should display the following minimum information:  (i) the performance of the L&I Product, measured by its net asset value; and  (ii) the performance of the non-leveraged, non-inverse version of the underlying index tracked by the L&I Product.
<b>Disclosure of tracking difference and tracking error</b>		
6.	How would the tracking difference and tracking error disclosure requirements set out in the circular entitled “Disclosure of Tracking Difference and Tracking Error” (the “TD/TE Circular”) apply to SFC-authorized L&I Products?	To improve transparency and provide further information to investors concerning the tracking performance of SFC-authorized L&I Products, the requirements set out in the TD/TE Circular are generally applicable. However, due to the day trading nature of L&I Products and L&I Products’ objective of delivering a multiple or the opposite of the return of their underlying indices only on a daily basis, tracking differences should be considered over one-day periods (i.e. daily tracking differences), as opposed to over a longer period of time (typically one year) for ETFs. In view of this, we have modified the requirements in the TD/TE Circular as set out in the FAQs below for compliance by L&I Product providers.
7.	What is the methodology for calculating the daily tracking differences (“Daily TD”) of L&I Products?	Daily TD is the difference between the daily return of an L&I Product and the Applicable Index Performance (as defined below).  Set out below is the formula for calculating the Daily TD of an L&I Product:  $TD = (NAV_T - NAV_{T-1}) / NAV_{T-1} - \text{Applicable Index Performance}$

	Question	Answer
		<p>Where:</p> <p>a. NAV<sub>T</sub> refers to net asset value (“NAV”) per unit of an L&amp;I Product on a dealing day, when both the NAV of the L&amp;I Product and the Applicable Index Performance are calculated and available.</p> <p>b. NAV<sub>T-1</sub> refers to NAV per unit of an L&amp;I Product on the immediately preceding dealing day before the dealing day specified in part (a), when both the NAV of the L&amp;I Product and the Applicable Index Performance are calculated and available.</p> <p>c. “Applicable Index Performance” is defined as:</p> <p>(i) if the L&amp;I Product tracks the non-leveraged and non-inverse version of the underlying index:</p> $[(\text{Index Value}_T - \text{Index Value}_{T-1}) / \text{Index Value}_{T-1}] * \text{LF}$ <p>Where:</p> <p>A. <b>Index Value<sub>T</sub></b> refers to the closing value of the underlying index tracked by the L&amp;I Product on a dealing day.</p> <p>B. <b>Index Value<sub>T-1</sub></b> refers to the closing value of the underlying index tracked by the L&amp;I Product on the immediately preceding dealing day before the dealing day specified in part (A).</p> <p>C. LF refers to the specified leverage factor of the L&amp;I Product (i.e. 2 for a 2x Leveraged Product and -1 for a -1x Inverse Product).</p> <p>(ii) if the L&amp;I Product tracks the leveraged or inverse version of the underlying index:</p> $[(\text{Index Value}_T - \text{Index Value}_{T-1}) / \text{Index Value}_{T-1}]$

	Question	Answer
		<p>Where:</p> <p>A. <b>Index Value<sub>T</sub></b> refers to the closing value of the underlying index tracked by the L&amp;I Product on a dealing day</p> <p>B. <b>Index Value<sub>T-1</sub></b> refers to the closing value of the underlying index tracked by the L&amp;I Product on the immediately preceding dealing day before the dealing day specified in part (A)</p> <p>An L&amp;I Product tracking a total return index (“TRI”) should use the underlying TRI as a benchmark to measure the Daily TD and an L&amp;I Product tracking a price return index (“PRI”) should use the underlying PRI as the benchmark accordingly.</p> <p>The calculation of the actual Daily TD of an L&amp;I Product tracking TRI may be done on the assumption/basis that the actual distributions made by the L&amp;I Product during the relevant calculation period are (immediately or as soon as reasonably practicable thereafter) reinvested into the L&amp;I Product in a consistent manner.</p> <p>Daily TD should be shown in percentage term and rounded to two decimal places (i.e. 0.01%), given that the Daily TD is calculated based on the daily return of L&amp;I Products.</p> <p>For the purpose of disclosure of the Daily TD of a L&amp;I Product set out in the FAQs here, the Daily TD shall be calculated and disclosed on a day when both the NAV of the L&amp;I Product and the Applicable Index Performance are calculated and available, as the purpose of this calculation is to assess how well the L&amp;I Product tracks the underlying index on a daily basis.</p>
8.	What are the disclosure requirements of Daily TD by newly listed L&I Products?	<p><i>Estimated Annual Average Daily TD</i></p> <p>For a newly listed L&amp;I Product, the estimated annual average Daily TD (the “Estimated Annual Average Daily TD”) should be calculated and disclosed in the KFS and on the website on the following basis and assumptions:</p> <p>a. a reasonable estimate of the initial product size by the L&amp;I Product provider;</p>

	Question	Answer
		<p>b. the performance of the underlying index one year prior to listing of the L&amp;I Product as the performance of the L&amp;I Product;</p> <p>c. there is no creation/redemption during the first year; and</p> <p>d. the assumptions, methodologies and treatment in respect of rebalancing, capital gains tax provisions, investment restrictions and dividend policies as disclosed in offering documents of the L&amp;I Product.</p> <p>The L&amp;I Product provider shall ensure the accuracy of the Estimated Annual Average Daily TD is kept under review. If the actual Daily TD substantially deviates from the Estimated Annual Average Daily TD as disclosed in the KFS and on the website, a notice should be issued to investors as soon as practicable to explain such deviation with an updated Estimated Annual Average Daily TD based on the L&amp;I Product provider's latest assumptions and updated information ("Notice on TD Deviation").</p> <p><i>Website disclosure</i></p> <p>Please see Appendices 1 and 2 for illustrative examples of website disclosure of Daily TD and average Daily TD of a leveraged product tracking a leveraged version of the underlying index and a leveraged product tracking a non-leveraged version of the underlying index; and see Appendices 3 and 4 for illustrative examples of website disclosure of an inverse product tracking an inverse version of the underlying index and an inverse product tracking a non-inverse version of the underlying index respectively during its first year of listing. Please note the following:</p> <p>a. The Estimated Annual Average Daily TD should be disclosed on the website of the L&amp;I Product upon its listing.</p> <p>b. The following items shall be presented on the L&amp;I Product's website after the L&amp;I Product has been listed for a period of at least a full month with a month-end date of that month during this period:</p>

	Question	Answer
		<p>(i) the actual Daily TD – this shall be presented in two graphs: (i) a graph showing both the Applicable Index Performance and L&amp;I Product’s daily performance, and (ii) a graph showing the actual Daily TD. The two graphs shall be updated monthly on a rolling basis; and</p> <p>(ii) the actual average Daily TD since the L&amp;I Product’s listing date – this shall be presented in a table and such figure should be updated monthly.</p> <p>c. For L&amp;I Products tracking PRI, please disclose in the graph that “<i>L&amp;I Product’s performance is calculated on an NAV to NAV basis without any reinvestment of distributions</i>”.</p> <p>d. For L&amp;I Products tracking TRI, where applicable, please disclose in the graph that “<i>L&amp;I Product’s performance is calculated on an NAV to NAV basis and assumes reinvestment of distributions</i>”.</p> <p>e. If a Notice on TD Deviation is issued, the Estimated Annual Average Daily TD as well as other relevant information on the website should be updated accordingly.</p> <p><i>Product Key Facts Statement (“KFS”) Disclosure</i></p> <p>Please note the following:</p> <p>a. The Estimated Annual Average Daily TD should be disclosed in the KFS under the section headed “Quick facts” of L&amp;I Products in addition to the estimated ongoing charges figure.</p> <p>b. The KFS under the section headed “Quick facts” should contain a statement to the effect that the Estimated Annual Average Daily TD is an estimated annual average daily TD figure and that investors should refer to the L&amp;I Product website for information on the actual average Daily TD.</p> <p>c. If a Notice on TD Deviation is issued, the Estimated Annual Average Daily TD shall be updated accordingly. Any revisions to the KFS must be made in</p>



	Question	Answer
		<p>accordance with the requirements under the Code on Unit Trusts and Mutual Funds.</p>
9.	<p>What are the disclosure requirements of Daily TD by L&amp;I Products beyond its first year of listing?</p>	<p><i>Website disclosure</i></p> <p>Please see Appendices 5 and 6 for illustrative examples of website disclosure of a leveraged product tracking a leveraged version of the underlying index and a leveraged product tracking a non-leveraged version of the underlying index; and see Appendices 7 and 8 for illustrative examples of website disclosure of an inverse product tracking an inverse version of the underlying index and an inverse product tracking a non-inverse version of the underlying index respectively beyond its first year of listing. Please note the following:</p> <ol style="list-style-type: none"> <li>a. The actual Daily TD for the past 12 months shall be presented on the website in two graphs: (i) a graph which shows both the Applicable Index Performance and the L&amp;I Product’s daily performance, and (ii) a graph which shows the actual Daily TD.</li> <li>b. The actual average Daily TD for the past 12 months shall be updated monthly on a rolling basis.</li> <li>c. If an L&amp;I Product has been listed for more than one full calendar year, the actual average Daily TD of <ol style="list-style-type: none"> <li>(i) each of the last ten calendar years; or</li> <li>(ii) each of the calendar years since the L&amp;I Product was listed if the L&amp;I Product has been listed for less than ten calendar years should be presented (see Appendices 5-8).</li> </ol> </li> <li>d. For L&amp;I Products tracking PRI, please disclose in the graph that “<i>L&amp;I Product’s performance is calculated on an NAV to NAV basis without any reinvestment of distributions</i>”.</li> <li>e. For L&amp;I Products tracking TRI, where applicable, please disclose in the graph</li> </ol>

	Question	Answer
		<p>that “L&amp;I Product’s performance is calculated on an NAV to NAV basis and assumes reinvestment of distributions”.</p> <p><i>KFS Disclosure</i></p> <p>Please note the following:</p> <ol style="list-style-type: none"> <li>a. The actual average Daily TD of the most recent calendar year shall be disclosed in the KFS under the section headed “Quick facts”.</li> <li>b. The KFS under the section headed “Quick facts” shall also contain a statement to the effect that the tracking difference disclosed in the KFS is the actual average Daily TD of the most recent calendar year and that investors should refer to the L&amp;I Product website for updated actual average Daily TD information.</li> <li>c. L&amp;I Product providers shall update the actual average Daily TD for the most recent calendar year on the KFS as soon as practicable after the calendar year end and in any event, no later than four months after 31 December (i.e. before end of April of the following year).</li> </ol>
10.	What is the methodology for calculating the tracking error (“TE”) of L&I Products?	<p>Tracking error (“TE”) measures how consistently an L&amp;I Product follows its underlying index and is an indicator of the quality of replication. It is also commonly referred to as the volatility (as measured by standard deviation) of the differences in the daily returns of a L&amp;I Product and the Applicable Index Performance.</p> <p>TE is measured by the standard deviation of the Daily TD. Standard deviation is calculated based on the Daily TD over the applicable one year period.</p> <p>Daily TD is calculated based on the formula set out in FAQ 7 above.</p> <p>TE should be shown in percentage term and rounded to two decimal places (i.e. 0.01%), given that TE is calculated with reference to the daily return of L&amp;I Products.</p>

	Question	Answer
11.	What are the disclosure requirements for TE of L&I Products?	<p>A L&amp;I Product should disclose its annual TE on its website after one year of its listing (Please see Appendices 5-8).</p> <p>Such annual TE for the past year as disclosed on the website should be updated monthly on a rolling basis.</p>
12.	What is considered the “listing date” in complying with the disclosure requirements for L&I Products?	When considering the listing history of the L&I Product in complying with the requirements in the FAQs, the listing date of the L&I Product shall be the first listing date on its primary listing market, whether in Hong Kong or overseas.
13.	When is the deadline for updating the information of Daily TD and TE on the website of the L&I Products?	L&I Product providers shall publish the information of Daily TD and TE on the L&I Product’s website within 5 business days of each month end in respect of such information required to be disclosed or updated on a monthly basis under the FAQs.
14.	Can the L&I Products provider present additional Daily TD and TE information other than those required by FAQs 6-13?	FAQs 6-13 set out the minimum requirements for disclosure of Daily TD and TE for L&I Products. So long as the L&I Product has complied with the Daily TD and TE disclosure required under FAQs 6-13, the L&I Product provider may present additional Daily TD and TE information, which shall only be in numerical presentation, using other basis and assumptions provided that such basis and assumptions are clearly set out and the presentation is fair, accurate and not misleading.

*Last update: 25 April 2016*

## Appendix 1 - Website disclosure for a Leveraged Product tracking a leveraged version of the underlying index during its first year of listing

ABC Issuer DEF Index Daily (2x) Leveraged Product

### Tracking Difference/ Tracking Error

#### Daily Tracking Difference (Daily TD)

- Daily TD is the difference between the daily return of a Leveraged Product and the daily performance of the underlying index, which is a leveraged index.

#### Tracking Error (TE)

- Tracking error measures how consistently a Leveraged Product delivers the daily performance of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

#### Tracking Difference

As of 31 Dec 2016

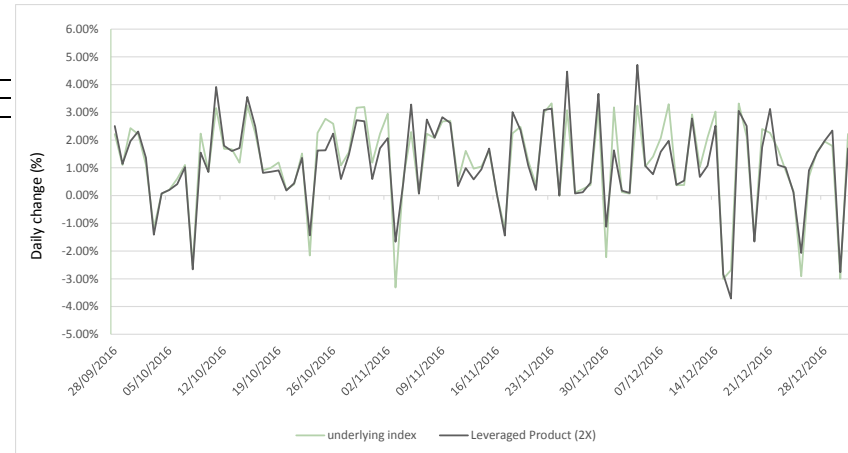
Product Listing Date: 28 Sep 2016

- Estimated Annual Average Daily TD: X.XX%

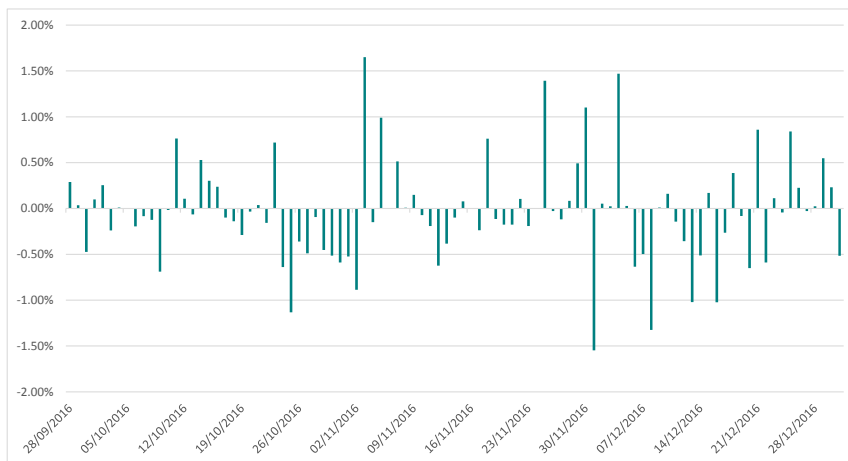
Actual Average Daily TD:

Since Listing (28 Sep 2016): Y.YY%

Graph (a) - Daily return of the Leveraged Product and the daily performance of the underlying index, which is a leveraged index



Graph (b) - Actual daily tracking difference



## Appendix 2 - Website disclosure for a Leveraged Product tracking a non-leveraged version of the underlying index during its first year of listing

ABC Issuer DEF Index Daily (2x) Leveraged Product

### Tracking Difference/ Tracking Error

#### Daily Tracking Difference (Daily TD)

- Daily TD is the difference between the daily return of an Leveraged Product and the 2x daily performance of the underlying index.

#### Tracking Error (TE)

- Tracking error measures how consistently a Leveraged Product delivers the 2x daily performance of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

#### Tracking Difference

As of 31 Dec 2016

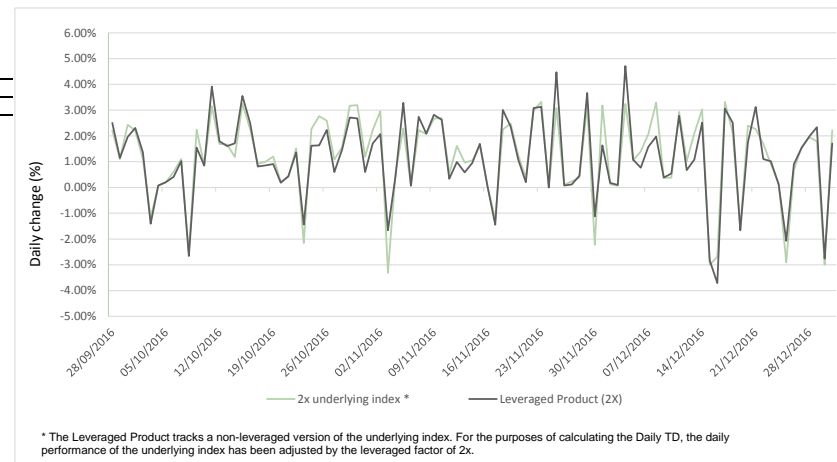
Product Listing Date: 28 Sep 2016

- Estimated Annual Average Daily TD: X.XX%

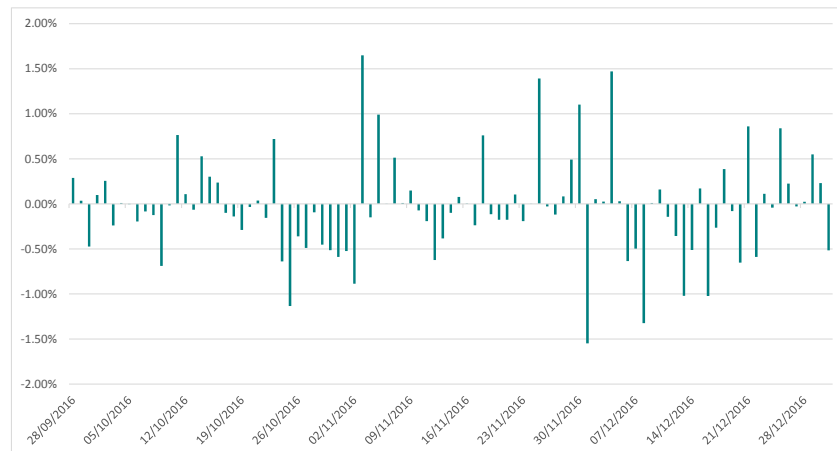
Actual Average Daily TD:

Since Listing (28 Sep 2016): Y.YY%

Graph (a) - Daily return of the Leveraged Product and the 2x daily performance of the underlying index



Graph (b) - Actual daily tracking difference



### Appendix 3 - Website disclosure for an Inverse Product tracking an inverse version of the underlying index during its first year of listing

ABC Issuer DEF Index Daily (-1x) Inverse Product

#### Tracking Difference/ Tracking Error

**Daily Tracking Difference (Daily TD)**

- Daily TD is the difference between the daily return of an Inverse Product and the daily performance of the underlying index, which is an inverse index.

**Tracking Error (TE)**

- Tracking error measures how consistently an Inverse Product delivers the daily performance of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

#### Tracking Difference

As of 31 Dec 2016

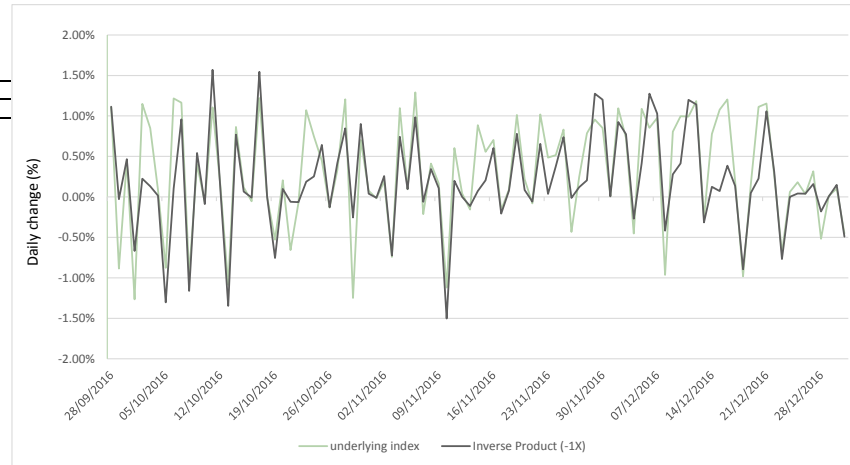
Product Listing Date: 28 Sep 2016

- Estimated Annual Average Daily TD: X.XX%

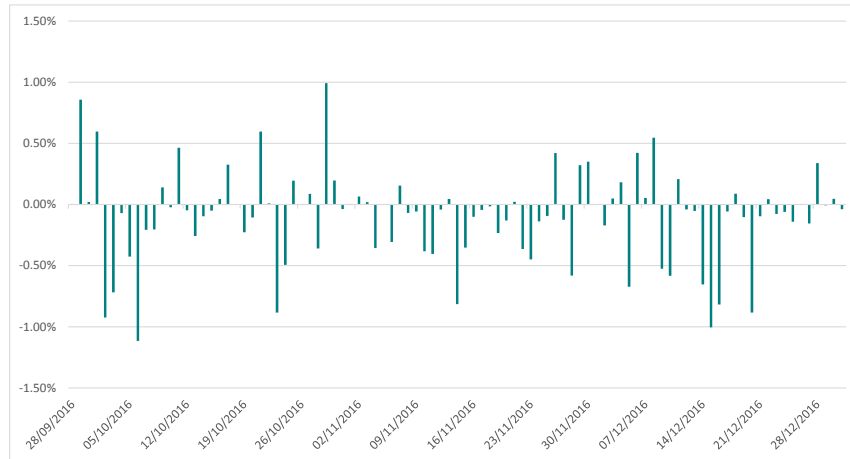
Actual Average Daily TD:

Since Listing (28 Sep 2016): Y.YY%

Graph (a) - Daily return of the Inverse Product and the daily performance of the underlying index, which is an inverse index



Graph (b) - Actual daily tracking difference



Appendix 4 - Website disclosure for an Inverse Product tracking a non-inverse version of the underlying index during its first year of listing

ABC Issuer DEF Index Daily (-1x) Inverse Product

**Tracking Difference/ Tracking Error**

**Daily Tracking Difference (Daily TD)**

- Daily TD is the difference between the daily return of an Inverse Product and the daily opposite return of the underlying index.

**Tracking Error (TE)**

- Tracking error measures how consistently an Inverse Product delivers the opposite return of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

**Tracking Difference**

As of 31 Dec 2016

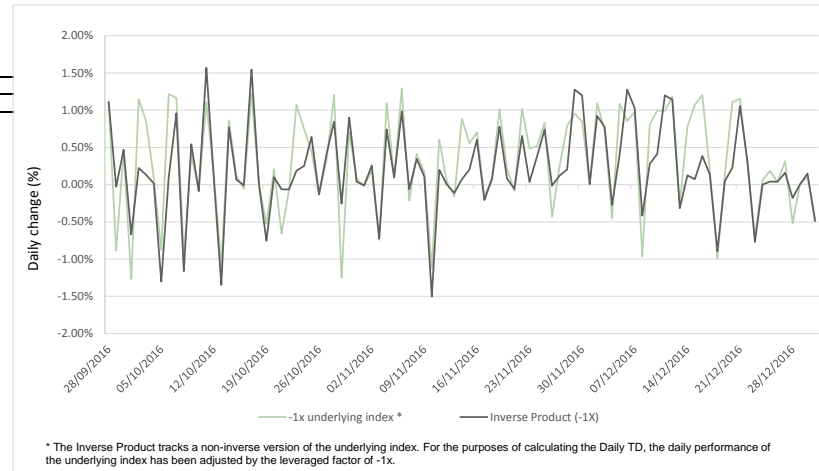
Product Listing Date: 28 Sep 2016

- Estimated Annual Average Daily TD: X.XX%

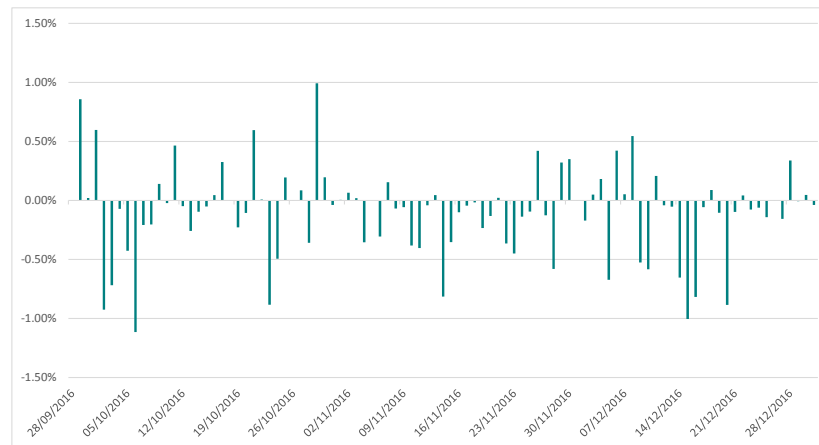
Actual Average Daily TD:

Since Listing (28 Sep 2016): Y.YY%

**Graph (a) - Daily return of the Inverse Product and the daily opposite return of the underlying index**



**Graph (b) - Actual daily tracking difference**



**Appendix 5 - Website disclosure for a Leveraged Product tracking a leveraged version of the underlying index beyond its first year of listing**

ABC Issuer DEF Index Daily (2x) Leveraged Product

**Tracking Difference/ Tracking Error**

**Daily Tracking Difference (Daily TD)**  
 - Daily TD is the difference between the daily return of an Leveraged Product and the daily performance of the underlying index, which is a leveraged index.

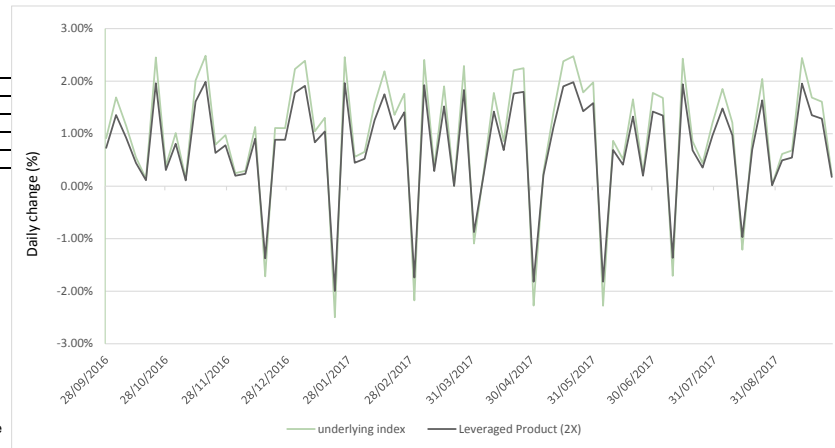
**Tracking Error (TE)**  
 - Tracking error measures how consistently a Leveraged Product delivers the daily performance of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

**Tracking Difference**

As of 28 Sep 2017  
 Product Listing Date: 28 Sep 2016  
 Rolling 1-Year Actual Average Daily TD: X.XX%

<b>Actual Average Daily TD for calendar year 2016: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2015: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2014: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2013: X.XX%</b>

**Graph (a) - Daily return of the Leveraged Product and the daily performance of the underlying index, which is a leveraged index**

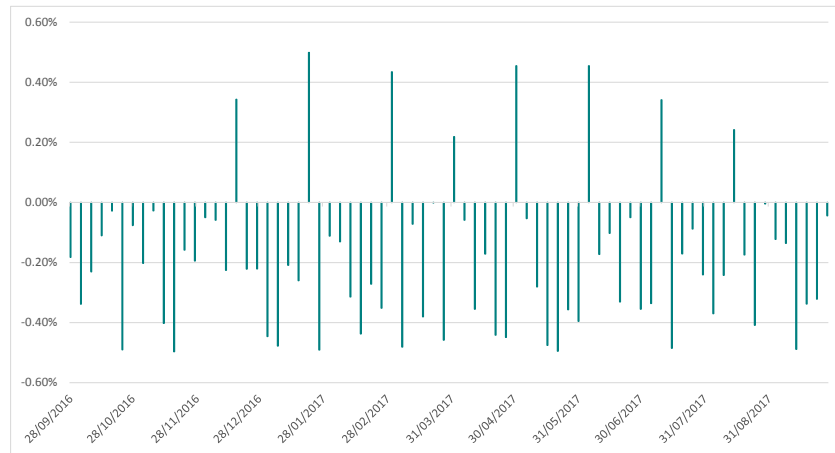


**Tracking Error**

As of 28 Sep 2017  
 Product Listing Date: 28 Sep 2012

**Rolling 1-Year TE<sup>^</sup>: Y.YY%**  
<sup>^</sup> TE is measured by the standard deviation of the Daily TD. The standard deviation is calculated based on the Daily TD over the rolling one year period.

**Graph (b) - Actual daily tracking difference**





**Appendix 6 - Website disclosure for a Leveraged Product tracking a non-leveraged version of the underlying index beyond its first year of listing**

ABC Issuer DEF Index Daily (2x) Leveraged Product

**Tracking Difference/ Tracking Error**

**Daily Tracking Difference (Daily TD)**  
 - Daily TD is the difference between the daily return of an Leveraged Product and the 2x daily performance of the underlying index.

**Tracking Error (TE)**  
 - Tracking error measures how consistently a Leveraged Product delivers the 2x daily performance of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

**Tracking Difference**

As of 28 Sep 2017  
 Product Listing Date: 28 Sep 2016  
 Rolling 1-Year Actual Average Daily TD: X.XX%

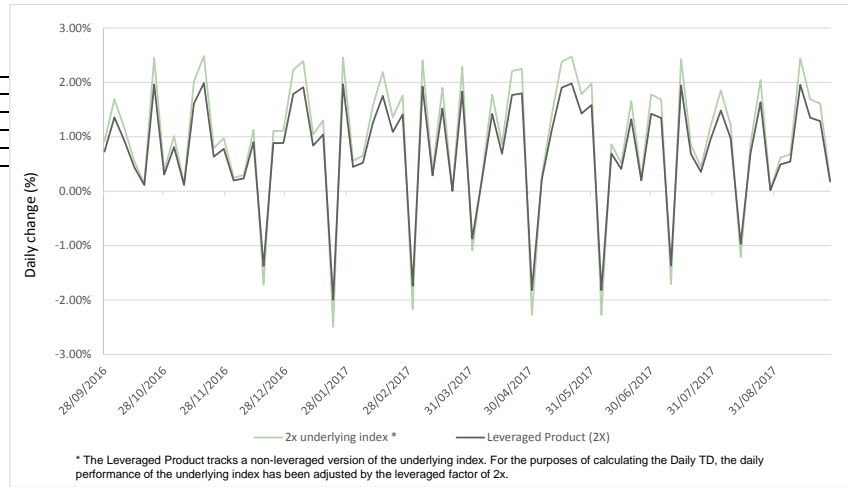
<b>Actual Average Daily TD for calendar year 2016: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2015: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2014: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2013: X.XX%</b>

**Tracking Error**

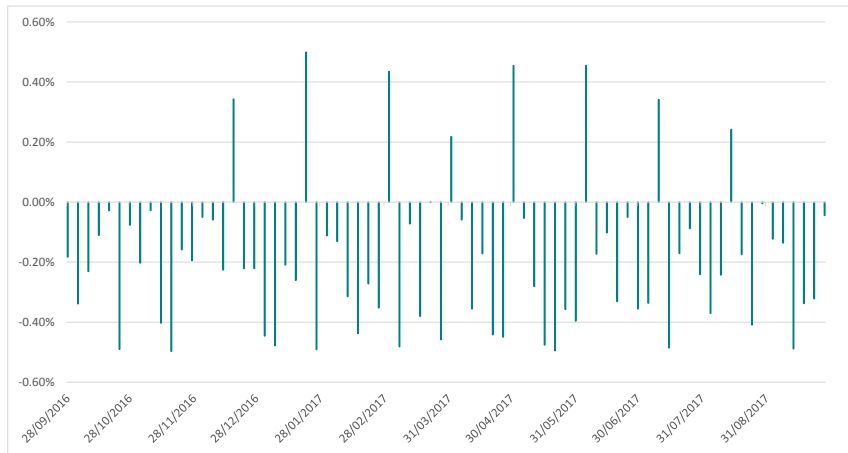
As of 28 Sep 2017  
 Product Listing Date: 28 Sep 2012

**Rolling 1-Year TE^: Y.YY%**  
 ^ TE is measured by the standard deviation of the Daily TD. The standard deviation is calculated based on the Daily TD over the rolling one year period.

**Graph (a) - Daily return of the Leveraged Product and the 2x daily performance of the underlying index**



**Graph (b) - Actual daily tracking difference**



**Appendix 7 - Website disclosure for an Inverse Product tracking an inverse version of the underlying index beyond its first year of listing**

ABC Issuer DEF Index Daily (-1x) Inverse Product

**Tracking Difference/ Tracking Error**

**Daily Tracking Difference (Daily TD)**  
 - Daily TD is the difference between the daily return of an Inverse Product and the daily performance of the underlying index, which is an inverse index.

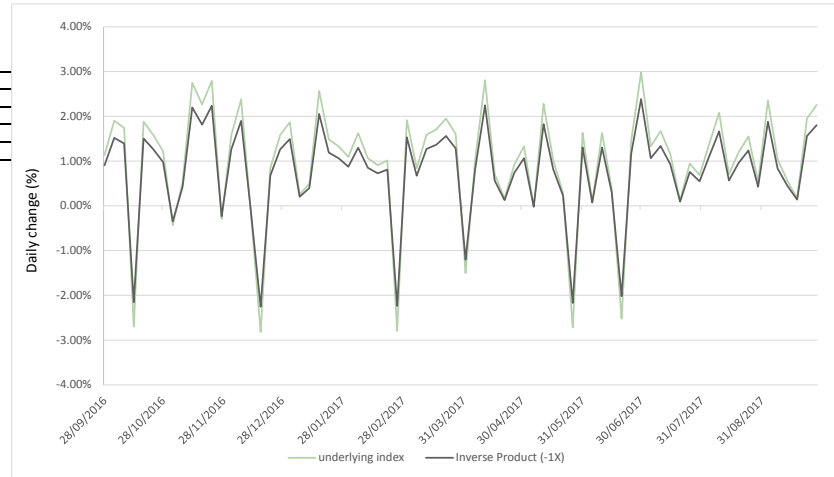
**Tracking Error (TE)**  
 - Tracking error measures how consistently an Inverse Product delivers the daily performance of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

**Tracking Difference**

As of 28 Sep 2017  
 Product Listing Date: 28 Sep 2016  
 Rolling 1-Year Actual Average Daily TD: X.XX%

<b>Actual Average Daily TD for calendar year 2016: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2015: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2014: X.XX%</b>
<b>Actual Average Daily TD for calendar year 2013: X.XX%</b>

**Graph (a) - Daily return of the Inverse Product and the daily performance of the underlying index, which is an inverse index**

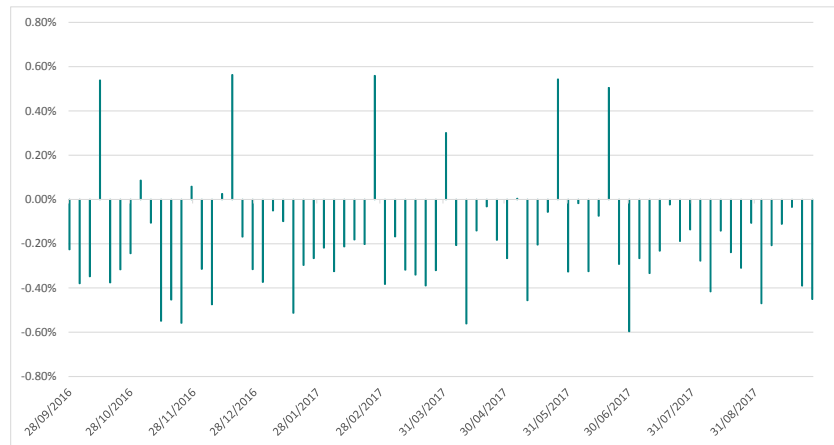


**Tracking Error**

As of 28 Sep 2017  
 Product Listing Date: 28 Sep 2012

**Rolling 1-Year TE^: Y.YY%**  
 ^ TE is measured by the standard deviation of the Daily TD. The standard deviation is calculated based on the Daily TD over the rolling one year period.

**Graph (b) - Actual daily tracking difference**



Appendix 8 - Website disclosure for an Inverse Product tracking a non-inverse version of the underlying index beyond its first year of listing

ABC Issuer DEF Index Daily (-1x) Inverse Product

**Tracking Difference/ Tracking Error**

**Daily Tracking Difference (Daily TD)**

- Daily TD is the difference between the daily return of an Inverse Product and the daily opposite return of the underlying index.

**Tracking Error (TE)**

- Tracking error measures how consistently an Inverse Product delivers the opposite return of the underlying index. It is the volatility (measured by standard deviation) of that daily return difference

**Tracking Difference**

As of 28 Sep 2017

Product Listing Date: 28 Sep 2016

Rolling 1-Year Actual Average Daily TD: X.XX%

**Actual Average Daily TD for calendar year 2016: X.XX%**

**Actual Average Daily TD for calendar year 2015: X.XX%**

**Actual Average Daily TD for calendar year 2014: X.XX%**

**Actual Average Daily TD for calendar year 2013: X.XX%**

**Tracking Error**

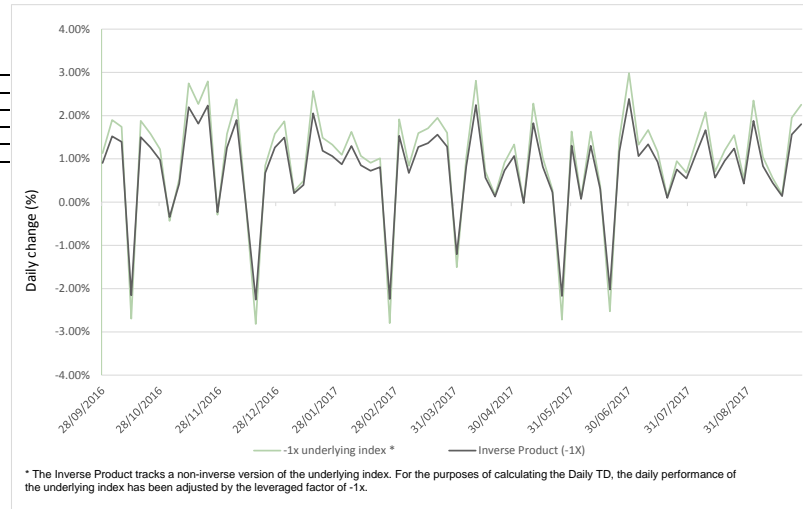
As of 28 Sep 2017

Product Listing Date: 28 Sep 2012

Rolling 1-Year TE<sup>^</sup>: Y.YY%

<sup>^</sup> TE is measured by the standard deviation of the Daily TD. The standard deviation is calculated based on the Daily TD over the rolling one year period.

**Graph (a) - Daily return of the Inverse Product and the daily opposite return of the underlying index**



**Graph (b) - Actual daily tracking difference**

