



MSCI World Ricardo Comparative Advantage Select Index with Risk Control

Methodology



June 14th, 2024

Version History

Readers can access other versions of the methodology for the MSCI World Ricardo Comparative Advantage Select Index with Risk Control online when they become available on Compass Financial Technologies website (www.compass-ft.com).

Date	Version	Change
February 6 th , 2024	1.0	Methodology Publication
March 22 nd , 2024	1.1	Add reference to the Parent Index and specify the Index description
May 1 st , 2024	1.2	Clarify Index description
June 14 th , 2024	1.3	Clarify Index description

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1 Introduction

The MSCI World Ricardo Comparative Advantage Select Index with Risk Control (the *Index*) is an index which provides exposure to the MSCI World Ricardo Comparative Advantage Select EUR Net Return Index (the *Parent Index*) while controlling the volatility of the strategy.

The Index keeps a constant exposure to the MSCI World Ricardo Comparative Advantage Select Index but controls its volatility by entering into a long or short position into MSCI World futures to achieve this target.

For example, if the volatility of the MSCI World Ricardo Comparative Advantage Select Index increases above 12.5%, the index would take a short position into the MSCI World future, to reduce overall exposure and reduce volatility. On the other hand, if the volatility of the MSCI World Ricardo Comparative Advantage Select Index reduces below 12.5%, the index would take a long position into the MSCI World future, to increase overall exposure and increase volatility.

The current long or short position on the MSCI World Future is called the Futures Overlay Level and it takes into account the current volatility of the MSCI World Ricardo Comparative Advantage Select Index and the Beta between the MSCI World Ricardo Comparative Advantage Select Index and the futures on the MSCI World.

This long or short exposure can be adjusted intraday to ensure the volatility remains at the 12.5% target level during the trading day. For this, the volatility of the index is calculated at 7 fixed time points during a trading day (hourly from 10am London time until the close at 4:30pm London Time) and the exposure to the future is adjusted accordingly. The index level, after applying the long and short futures position to control for volatility, is called the Uncapped Final Index Level.

As a final step, the Index applies a mechanism to cap the positive index returns at 4% p.m. (i.e. max 48% per annum), leading to the Capped Final Indices (there is 1 index per business day in the month). The purpose of the cap is to manage and control risk and costs linked to the hedging of the Index. Please note that the cap mechanism may potentially limit the upside of the Index compared to the performance of the MSCI World Ricardo Comparative Advantage Select Index, particularly if the return of the MSCI World Ricardo Comparative Advantage Select Index exceeds 4% in any given month. The Final Index is calculated as the average of the 20 capped indices.

The Index leverages on index engineering expertise to offer investors a risk controlled exposure to the MSCI World Ricardo Comparative Advantage Select EUR Net Return Index. Index methodology and related policies of the *Parent index* are available in section 11.

The Index can be accessed online on the Compass Financial Technologies website (www.compass-ft.com) or on Bloomberg or Refinitiv.

The Index is owned and sponsored by MSCI. The Index Administrator and Calculation Agent is Compass Financial Technologies.

MSCI World Ricardo Comparative Advantage Select Index with Risk Control		
Index Name	Bloomberg Code	Refinitiv Code
MSCI World Ricardo Comparative Advantage Select Index with Risk Control	RICARDO Index	.RICARDO

Table 1: MSCI World Ricardo Comparative Advantage Select Index with Risk Control - Publication Codes

2 Index Calculation

2.1 Definition

- ACT_{t_1, t_2} is defined as the number of calendar days between t_1 and t_2
- A_Ct_k is defined, with respect to the hourly observation period k , as the active futures contract in position just after the end of the last hourly observation period of t_k according to the roll schedule defined in the Annex
- $Beta_t$ is with respect to Business Day t , the level computed in Section 2.5
- a *Business Day* t is any Scheduled Business Day on which no Disruption Event happen
- CFI_t^i is with respect to Business Day t and integer $i \in \{1, 2, \dots, 20\}$, the level of the i^{th} Capped Final Index on t as computed in Section 2.6
- Cap is the Cap level used in the Capped Final Index computation. Cap is equal to 4%
- Ct_t is with respect to Business Day t ,
 - if $t \geq$ October 18th, 2023, the EUREX MSCI World Index Futures contract as defined in Appendix A
 - before October 18th, 2023, due to a lack of data, the CME E-mini S&P 500 Futures contract as defined in Appendix A is used instead of the EUREX MSCI World Index Futures contract
- Δ_{t_1, t_2} is defined as $ACT_{t_1, t_2}/365$
- FI_t is with respect to Business Day t , the level of the Final Index on t as computed in Section 2.7
- FO_k is with respect to the hourly observation period k , the level of the Future Overlay as computed in Section 2.3
- $FutExpo_k$ is with respect to the hourly observation period k , the level of the Future Exposure as computed in Section 2.4
- FX_t is in respect of Business Day t , the EUR-USD WM Reuters 4pm London Time fixing published level on Business Day t or any successor service or page for the purpose of displaying such foreign spot exchange rate, as determined by the Calculation Agent or the latest WM Reuters Rate if no such rate is published as of such date
- *Index Component* means the Parent Index or any Futures contract used in the computation of the Index
- *Intraday Data Provider* means the Refinitiv Data Platform
- k means any hourly observation period $[Start\ Time, End\ Time[$ as defined in table 4 of Annex B on any Business Day. In respect of any k , we define:
 - t_k as the Business Day including k : $t_k = t_0 + \lfloor \frac{k}{7} \rfloor$
 - s_k as the time period referring to k during the Business Day t_k : $s_k = k - \lfloor \frac{k}{7} \rfloor \times 7$. By definition, $s_k \equiv k \pmod{7}$
- *Parent Index* is the MSCI World Ricardo Comparative Advantage Select EUR Net Return Index published on Refinitiv code *MIWOIN090NEU*
- $RCFI_t^i$ is with respect to Business Day t and integer $i \in \{1, 2, \dots, 20\}$, the level of the i^{th} Raw Capped Final Index on t as computed in Section 2.6

- RFR_t is the Euro short-term rate (ESTR) observed on Business Day t according to the Refinitiv code ESTRON (or any successor publication). If such rate dated as of t is missing, it means the latest rate available
- $t - 1$ is the Business Day preceding t
- t_0 is the Base Date. t_0 means 28nd February 2011
- TCF is the Future transaction cost
 - if $t \geq$ October 18th, 2023, TCF is equal to 0.015%
 - otherwise TCF is equal to 0.005%
- UFI_t is with respect to Business Day t , the level of the Uncapped Final Index on t as computed in Section 2.2
- UI_t is with respect to Business Day t , the official index level of the Parent Index
- $VP_{k,Ct}$ is, with respect to hourly observation period k and futures contract Ct ,
 - if Ct is a CME E-mini S&P 500 Futures contract, $VP_{k,Ct} = VP_{k,Ct}^{trade}$
 - if Ct is a EUREX MSCI World Index Futures contract,
 - $(VP_{k,Ct}^{ask} + VP_{k,Ct}^{bid})/2$ if no trade occurred over the hourly observation period s_k ,
 - else, $VP_{k,Ct}^{trade}$
- $VP_{k,Ct}^{trade}$ is, with respect to hourly observation period k and futures contract Ct , the volume weighted average price (VWAP) computed using the trades and the volumes retrieved at 21:00 London time via the Intraday Data Provider over period s_k as described in table 4 of Appendix B
- $VP_{k,Ct}^{ask}$ is, with respect to hourly observation period k and futures contract Ct , the volume weighted average price (VWAP) computed using the ask quotes and the ask sizes retrieved at 21:00 London time via the Intraday Data Provider over period s_k as described in table 4 of Appendix B
- $VP_{k,Ct}^{bid}$ is, with respect to hourly observation period k and futures contract Ct , the volume weighted average price (VWAP) of futures contract Ct_t using the bid quotes and the bid size retrieved at 21:00 London time via the Intraday Data Provider over period s_k as described in table 4 of Appendix B
- VT is the Volatility Target and is equal to 12.5%

2.2 Calculation of the Uncapped Final Index level

For any Business Day t following t_0 the UnCapped Final Index level is determined by:

$$UFI_t = UFI_{t-1} \times \left(\left[\frac{UI_t}{UI_{t-1}} - RFR_{t-1} \times \Delta_{t-1,t} \right] + \left[\frac{FO_{k_1}}{FO_{k_2}} - 1 \right] \times \frac{FX_{t-1}}{FX_t} \right)$$

With

$$UFI_{t_0} = 100$$

And

- FO_{k_1} is the level of FO on t at the end of period 6 (as defined in table 4 of the Annex)
- FO_{k_2} is the level of FO on $t - 1$ at the end of period 6 (as defined in table 4 of the Annex)

2.3 Determination of the Futures Overlay level

For any hourly observation $k > 0$ the Futures Overlay level FO is determined by:

$$FO_k = FO_{k-1} + FutUnit_{max(k-2,0)} \times (VP_{k,A.Ct_k} - VP_{k-1,A.Ct_k}) - FO_{k-1} \times |FutExpo_{max(k-2,0)} - FutExpo_{max(k-1,0)}| \times TCF$$

With,

$$FO_0 = 100$$

And,

$$FutUnit_k = \frac{FutExpo_k \times FO_k}{VP_{k,A.Ct_{k+2}}}$$

2.4 Determination of the Futures Exposure

For any hourly observation $k > 0$, the Futures Exposure is computed as:

$$FutExpo_k = \begin{cases} (\min(IndexExpo_k, 175\%) - 1) \times Beta_l, & \text{if } |FutExpo_{k-1} - (IndexExpo_k - 1) \times Beta_l| \geq 10\% \\ FutExpo_{k-1}, & \text{otherwise} \end{cases}$$

$$FutExpo_0 = (IndexExpo_0 - 1) \times Beta_{t_0}$$

Where,

$$IndexExpo_k = \frac{VT}{Beta_l \times IntradayVol_k}$$

$$IntradayVol_k = \max(\theta_{0.90,k}, \theta_{0.94,k})$$

$$\theta_{\lambda,k}^2 = \lambda \times \theta_{\lambda,k-1}^2 + 1694 \times (1 - \lambda) \times \ln \left(\frac{VP_{k,A.Ct_k}}{VP_{k-1,A.Ct_k}} \right)^2$$

With,

$$\lambda \in \{0, 90, 0, 94\}$$

$$\theta_{0.90,0} = \theta_{0.94,0} = 14.43\%$$

Where $Beta_l$ is the Beta as defined in Section 2.5 as of the Business Day l preceding the Business Day including k

2.5 Determination of the Beta

For any Business Day $t > t_0$ the Beta is determined by:

$$Beta_t = \frac{IndexDailyVol_t}{FutDailyVol_t}$$

With,

$$IndexDailyVol_t = \max(\theta_{0.90,t}^{Index}, \theta_{0.94,t}^{Index})$$

Where

$$\theta_{\lambda,t}^{Index^2} = \lambda \times \theta_{\lambda,t-1}^{Index^2} + 242 \times (1 - \lambda) \times \ln \left(\frac{UI_t}{UI_{t-1}} \right)^2$$

With,

$$\lambda \in \{0, 90, 0, 94\}$$

And,

$$\theta_{0.90,t_0}^{Index} = \theta_{0.94,t_0}^{Index} = 14.11\%$$

$$FutDailyVol_t = \max(\theta_{0.90,t}^{Futures}, \theta_{0.94,t}^{Futures})$$

$$\theta_{\lambda,t}^{Futures^2} = \lambda \times \theta_{\lambda,t-1}^{Futures^2} + 242 \times (1 - \lambda) \times \ln \left(\frac{VP_{k_1,A-Ct_{k_1}}}{VP_{k_2,A-Ct_{k_1}}} \right)^2$$

$$\theta_{0.90,t_0}^{Futures} = \theta_{0.94,t_0}^{Futures} = 17.23\%$$

$$Beta_{t_0-1} = Beta_{t_0}$$

- k_1 is the hourly observation such that $t_{k_1} = t$ and $s_{k_1} = 6$
- k_2 is the hourly observation such that $t_{k_2} = t - 1$ and $s_{k_2} = 6$

2.6 Determination of the Capped Final Indices

For any integer $i \in \{1, 2, \dots, 20\}$, we define the set of all possible reset dates, $\{R\}_i = \{t_{k \times 20 + (i-1)} | k \in \mathbb{N}\}$. For any Business Day $t > t_0$ and for any integer $i \in \{1, 2, \dots, 20\}$, $R^i(t)$ is defined as the largest Business Day in the set of reset dates $\{R\}_i$ strictly preceding t . If no such date exists, $R^i(t) = t_0$. We then define for each i , the i^{th} Capped Final Index as:

$$CFI_t^i = \min \left(CFI_{R^i(t)}^i \times (1 + Cap), RCFI_t^i \right)$$

with,

$$CFI_{t_0}^i = 100$$

$CFI_{R^i(t)}^i$ is the level of the Capped Final Index on the Performance Cap Reset Date $R^i(t)$. $RCFI_t^i$ is the i^{th} Raw Capped Final Index level on t defined as:

$$RCFI_t^i = \begin{cases} CFI_{t-1}^i \times \frac{UFI_t}{UFI_{t-1}}, & \text{if } t-1 \text{ is a Performance Cap Reset Date} \\ RCFI_{t-1}^i \times \frac{UFI_t}{UFI_{t-1}}, & \text{otherwise} \end{cases}$$

$$RCFI_{t_0}^i = 100$$

2.7 Determination of the Final Index

For any Business Day $t > t_0$, the Final Index level, FI_t is computed as:

$$FI_t = \sum_{i=1}^{20} \frac{CFI_t^i}{20}$$

And,

$$FI_{t_0} = 100$$

2.8 Rounding of Data

The Final Index level is calculated without rounding, the publication is rounded to 4 decimals.

2.9 Scheduled Business Day

A Scheduled Business Day is a day that is both a regular trading day on NYSE, a regular trading day for the MSCI World Index Futures contract and a day that is not an official holiday in the United Kingdom.¹

2.10 Calculation frequency and dissemination

The MSCI World Ricardo Comparative Advantage Select Index with Risk Control is calculated and published once a day on every Business Day.

Index levels are published on the Compass Financial Technologies website (www.compass-ft.com) and are distributed to Bloomberg and Refinitiv under the ticker symbols listed in table 1.

3 Disruption Events

If any Disruption Event occurs on any Scheduled Business Day for any Index component, then the Calculation Agent may:

- publish its good faith estimate of the Index Level for that Business Day (notwithstanding the occurrence of a Disruption Event) using its good faith estimate of the value of the Index Component affected by the occurrence of a Disruption Event. Any such estimate may be subject to correction once the relevant Disruption Event has ceased to exist; and/or
- suspend the calculation and dissemination of the Index and the Index Level until the first succeeding Business Day which is not affected by a Disruption Event for any Index Component.

Disruption Event means any of the disruption events listed below and affecting the Index Components

3.1 Parent Index Disruption Event

“Parent Index Disruption Event” means, with respect to an Parent Index, the non-publication of the level of such Index, or the occurrence of a “disruption event” by the Calculation Agent of such Parent Index.

3.2 Futures Contract Disruption Event

“Futures Contract Disruption Event” means, in respect a futures contract which is an Index component, any event that, in the reasonable opinion of the Index Calculation Agent, disrupts or impairs the determination of the level or price of such instrument, and includes, without limitation the occurrence or existence of a Failure to Publish, Trading Disruption, Exchange Disruption or Early Closure.

Where:

- “Failure to Publish” means the failure by the relevant price source to make public the relevant price, or the temporary or permanent discontinuance or unavailability of the price source,
- “Trading Disruption” means, in respect of a Futures contract, any suspension of or limitation on trading imposed by the relevant Exchange
- “Exchange Disruption” means, in respect of a Futures Contract, any event (other than an Early Closure) that disrupts or impairs the ability of market participants in general to effect transactions in, or obtain market values for such futures contract on the relevant Exchange
- “Early Closure” means, in respect of a futures contract, the closure on any Exchange Business Day of the Exchange on which the Futures Contract is traded prior to its Scheduled Closing Time.

¹January 28th, 2014 and January 29th, 2014 are not considered as Scheduled Business Days due to a lack of data on both dates

4 Index Governance

4.1 Index Owner and Sponsor

MSCI is owner and sponsor of the Index.

4.2 Index Administrator

Compass Financial Technologies (France) is the Administrator of the Index ("the Index Administrator"). The Index Administrator is responsible for the day-to-day management of the Index and is also responsible for decisions regarding the interpretation of these rules.

4.3 Index Calculation Agent

Compass Financial Technologies is the Calculation Agent of the Index. It is responsible for the day-to-day management of the Index computation according to this methodology.

4.4 Index Committees – Supervisor

Compass Financial Technologies has established governance functions to review and provide challenges on all aspects of the Index determination process. Governance functions are managed by the Compass Oversight Committee and by the Index Steering Committee.

Compass Oversight Committee:

The Compass Oversight Committee oversees all areas of the benchmark determination processes. It is responsible for supervising and controlling the Index operations team on all Compass indices. It is also responsible for:

1. Periodic review of incidents
2. Making final decisions in case the Index operations team are not capable or allowed to take decisions
3. Defining and implementing organisation procedures for the Index operations team
4. Defining and overseeing measures that allow for mitigation of operational risks
5. Supervising internal or external audit results
6. The implementation and supervision of the potential codes of conduct that have to be implemented

The Committee is comprised of senior representatives of Compass Financial Technologies and external industry experts.

Index Steering Committee (the Steering Committee):

The Steering Committee is responsible for:

1. Determining the calculation methodology and the rules governing the publication of the Index
2. Making periodic reviews of the Index to validate the robustness of the methodology and to analyse the impact of methodology changes
3. Organising consultation with Index stakeholders if necessary
4. Ensuring that Index offers a reliable and representative view of the market

The Steering Committee is composed of members from Compass and MSCI. The Steering Committee may include individuals or representatives of companies, academics, external counsels, or market participants.

The Steering Committee assembles once a year in January. However, at the request of a member of the committee, the Steering Committee may meet on any other day of the year to discuss potential "market

emergency” and “force majeure” events or any other situation, which makes an extraordinary meeting necessary.

All Committee decisions will be published without delay following the Committee decision.

The Steering Committee members as of February 2024 are:

- Edouard Mouton, Compass Financial Technologies
- Guillaume Le Fur, Compass Financial Technologies
- a member of the MSCI Equity Index Committee
- a member of the MSCI Structured Products New Product Development Team

As of February 6th, 2024, Guillaume Le Fur chairs the Steering Committee.

5 Methodology Changes - Maintenance

This methodology may be supplemented, amended in whole or in part, revised or withdrawn at any time. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the Index is compiled or calculated or affect the Index in another way.

In the absence of exceptional circumstances affecting the Index calculation or methodology, this Methodology is reviewed annually. The review will include, inter alia, the following points:

1. Verify if the methodology and computation are still in line with the original purpose of the Index
2. Make sure the quality and quantity of the input data remain sufficient

Changes made to this methodology are published after the review date and implemented on a reasonable time horizon.

Compass Financial Technologies may terminate the Index due to certain extraordinary market circumstances.

Changes or termination will be subject to the review and approval of the Steering Committee which will receive all the information related to the change or termination. In case of material changes, a notice will be provided at least two weeks in advance.

In the case of a termination that is not linked to extraordinary events that would prevent the Index Administrator from maintaining the Index, a notice will be provided at least 3 months in advance.

The results of the Steering Committee meetings will be published in a press release on Compass Financial Technologies website and distributed timely to data vendors and major news sources.

6 Expert Judgment

The Index is based on written and transparent rules and procedures with the purpose of minimising as much as possible the exercise of discretion and expert judgment.

Nevertheless, the exercise of expert judgment may become necessary in case of errors and Index restatements, delayed and missing data, or unexpected situations arising from market stress.

In the event that expert judgment is exercised, this will be done by resorting to the written procedures reported in the methodology and by communicating the decisions taken to the Steering Committee and the Internal Compliance Function in order to prevent conflicts of interest and to protect the integrity and the independence of the Index determinations. In addition, the interest of the Index users and the market integrity will be taken into account.

7 Errors and Recalculations

Even though the process of each Index calculation is completely automated and pre-defined, an error can be discovered after the publication of the Index.

Such errors may be caused by a range of events including :

- Incorrect or restated input data (prices, rates, index levels which are incorrect or have been updated by exchanges or data provider) or incorrect ancillary data (errors in the index calendar data,...) or,
- Incorrect application of the Index methodology (error in the implementation and/ or application of the index methodology).

The Index Administrator has implemented a wide range of automated checks to capture and validate exceptions which could indicate an error or data problem. These include checks on large or unexpected constituent-level price movements and large or unexpected Index-level movements. Additional comparative and consistency checks are also in place. All exceptions or warning alerts are reviewed and analyzed by the Index Administrator.

In the instance an error is not identified and resolved before the Index calculation and publication, or if input data received is revised retrospectively, the Index Administrator will review the impact on the Index. The decision to restate the Index is based on different factors including:

- When the error or input data restatement occurred and when it was discovered
- The magnitude of the error
- Whether the impacted Index is linked to tradable products

In the case of Index levels have to be restated, the Index Administrator will:

- Inform as soon as possible its customers and Index stakeholders
- Republish the Index values

In the case where a material error is discovered and the Index Administrator recognises a manipulation or an attempted manipulation of any of the Index level or the input data, it will be reported to the regulator.

8 Exceptional Circumstances

Exceptional circumstances, including the occurrence of a Disruptive Event, which make the calculation or replication of the Index not possible may lead to the following actions:

- the Calculation Agent may exercise certain discretionary powers under the Index Methodology
- the Calculation Agent may suspend the calculation and publication of the Index levels
- the Administrator of the Index may make an amendment or change to these Index Rules
- the Index Administrator may suspend and terminate the Index

The existence of exceptional circumstances may also result in the postponement of the calculation and dissemination of the Index to a later date than provided for in the Index Methodology.

9 Cases not covered in rules

In cases which are not expressly covered in these rules, operational adjustments will take place along the lines of the aim of the Index. Operational adjustments may also take place if, in the opinion of the Index Administrator, it is desirable to do so to maintain a fair and orderly market in derivatives on the Index and/or this is in the best interests of the investors in products based on the Index and/or the proper functioning of the markets. The Index Administrator will report to the Supervisor if it took a decision about a case which is not specifically covered in the rules for comments and review.

10 Liability

The Index Administrator and the Supervisor are not liable for any losses resulting from supplementing, amending, revising or withdrawing the rules for every Index. The Administrator will do everything within its power to ensure the accuracy of the composition, calculation, publication and adjustment of the Index in accordance with relevant rules. However, neither the Index Administrator, nor the Supervisor are liable for any inaccuracy in the Index composition, calculation and the publication of the Index levels, the information

used for making adjustments to the Index and the actual adjustments. Furthermore, the Index Administrator and the Supervisor do not guarantee the continuity of the composition of any of the Index, the continuity of the method of calculation of the Index, the continuity of the dissemination of the Index levels, and the continuity of the calculation of the Index.

11 Information related to the Parent Index

Parent Index - Methodology

www.msci.com/documents/10199/6b6b7c4b-d547-e1cd-8f38-9f11ed959479

Parent Index - Corporate Events Methodology

<https://www.msci.com/index/methodology/latest/CE>

Parent Index - Index Policy

<https://www.msci.com/documents/10199/63cc6c6a-6709-a83e-16b9-e5acdc07083>

Parent Index - Index constituents

<https://www.msci.com/constituents>

12 Information related to the EUREX MSCI World Futures

Futures contract specification

<https://www.eurex.com/ex-en/markets/idx/msci/regional/MSCI-World-Index-Futures-in-USD-254552>

Appendix

Appendix A

Futures contract roll schedule

The table below displays the futures contract which should be considered as active on each Business Day in relation to the Futures Overlay computation.

The active contract Ct_t will roll every quarter in March, June, September and December to the next active contract at the end of the 4th Business Day before the last trade date of the active Ct_t . As an example, on the close of the 11th of March 2024, Ct_t will roll from the March 2024 contract to the June 2024 contract.

For the sake of clarification, on each roll date t , the active contract will be defined as the rolled-out contract on that day.

Contract	Prefix Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Contract	FMWO	H	H	H	M	M	M	U	U	U	Z	Z	Z

Table 2: Futures Contracts Roll Matrix

Appendix B

VWAP period definition used in relation to the EUREX MSCI World Index Futures contract

VWAP period definition		
Period k	Start time (included)	End time (excluded)
0	10:00 London time	10:10 London time
1	11:00 London time	11:10 London time
2	12:00 London time	12:10 London time
3	13:00 London time	13:10 London time
4	14:00 London time	14:10 London time
5	15:00 London time	15:10 London time
6	16:20 London time	16:30 London time

Table 3: VWAP period definition - EUREX MSCI World Index Futures contract

VWAP period definition used in relation to the CME E-Mini S&P 500 Futures contract

VWAP period definition		
Period k	Start time (included)	End time (excluded)
0	10:00 New York time	10:10 New York time
1	11:00 New York time	11:10 New York time
2	12:00 New York time	12:10 New York time
3	13:00 New York time	13:10 New York time
4	14:00 New York time	14:10 New York time
5	15:00 New York time	15:10 New York time
6	15:55 New York time	16:00 New York time

Table 4: VWAP period definition - CME E-Mini S&P 500 Futures contract

13 Notice and Disclaimer

Compass Financial Technologies SA:

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