



AMS - Adaptive Market Strategy Indices

Methodology

February 7th, 2024

Version History

Readers can access other versions of the methodology online when they become available on Compass Financial Technologies website (www.compass-ft.com).

Date	Version	Change
November 23 rd , 2023	1.0	Methodology Publication
February 7 th , 2024	1.1	Add reference to the Index Adjustment and Disruption Policy

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1 Introduction

The Adaptive Market Strategy (the *AMS*, the *Indices* or the *Index*) is a family of single strategy indices invested in an Underlying Component according to a quantitative model developed and maintained by the Allocation Provider.

The Adaptive Market Strategy (“AMS”) is designed to take the “temperature” of the core equity markets and rebalance its market exposure accordingly. AMS can go long or short equities or stay in cash. The Index leverages on the Allocation Provider’s expertise to offer investors a risk controlled exposure to the Underlying Component.

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

The Indices are owned by Compass Financial Technologies S.A. The Index Administrator and Calculation Agent is Compass Financial Technologies (France).

Adaptive Market Strategy Indices			
AMS Index	Index Name	Bloomberg Code	Refinitiv Code
AMSSPY	AMS Index on SPY US ETF	AMSSPY Index	.AMSSPY

Table 1: Adaptive Market Strategy Indices - Publication Codes

2 Index Mechanism

2.1 Index allocation and composition

Each AMS index invests in one single Underlying Component based on signals and exposures provided by the Allocation Provider. The allocation can be revised up to a maximum of 2 times per day, on the open and/or close of the market. Each new allocation is provided by the Allocation Provider via an Allocation Notice. Once received and validated by the Index Calculation Agent, the Allocation Notice will be implemented, based on the time it is received by the Index Calculation Agent and based on the specific cut off times defined by the Index Calculation Agent.

2.2 Underlying Components

The Underlying Component of each AMS Index is either a liquid investment fund (such as an ETF), a liquid index or a liquid stock. Currently the list of investment products used as underlying component are the following:

AMS Indices - Underlying Components				
AMS Index	Underlying Component	Bloomberg Code	Refinitiv Code	Currency
AMSSPY	SPDR S&P 500 ETF Trust	SPY US Equity	SPY	USD

Table 2: AMS - Adaptive Market Strategy Indices - Underlying Components

In respect of Calculation Date t and Underlying Component i , Underlying Component prices are based on the close or open price on t , as displayed on the Bloomberg or Refinitiv pages provided in table 2 or the last available closing price if no closing price is available on t .

2.3 Allocation Provider

Amington Management SAS is the Allocation Provider.

2.4 Allocation model

The Adaptive Market Strategy (“AMS”) is designed to take the “temperature” of the core equity markets and adjust its market exposure accordingly.

AMS generates market signals and uses them to rebalance its asset allocation between an underlying (the Underlying Component) and cash. AMS may enter long or short positions in the Underlying Component or stay in cash. Executions of AMS rebalancings may take place on the open or close of the Underlying Component depending on when the market signal occurs.

The AMS objective is to outperform the Underlying Component whilst limiting its overall volatility.

AMS uses a dynamic leverage approach (linked to recent market conditions) to adapt its risk management. The AMS approach is split in 2 phases:

- **Phase 1: Market signals:** AMS runs analyses on different US equity assets, in parallel, to produce its market signals.

AMS uses realized volatilities (30-day, 60-day, 90-day realized volatilities) to determine the current market conditions.

AMS uses customized mathematical indicators to identify mid-term and short-term signals on different US equity assets. A short-term signal is only deemed relevant if a concomitant mid-term signal is already on-going (i.e. active) at the time the short-term signal occurs.

The AMS approach is based on the reversal of those mathematical indicators: they must first reach “Exhaustion Levels” (Excess Bearish/ Excess Bullish Levels) and then recover (or retrace) from those “Exhaustion Levels” for valid signals to occur.

AMS performs sanity checks: it compares the signals received from the different US equity assets to check if they are consistent and synchronized with each other. If the sanity checks are conclusive, the market signal is deemed valid, and an AMS rebalancing may take place (see Phase 2).

AMS monitors every market signal during its lifetime. AMS employs a stop-loss and a target gain methodology applied to the market signal itself to fix the conditions that must be met for a market signal to be over (and therefore for AMS to return to a 100%-cash allocation).

The validation of a market signal not only fixes the direction of the AMS rebalancing (long/short/neutral the Underlying Component) but also the initial leverage to use:

Initial Leverage on Long positions :

$$Minimum_Initial_Leverage_Long < X < Maximum_Initial_Leverage_Long$$

Initial Leverage on Short positions :

$$-Maximum_Initial_Leverage_Short < X < -Minimum_Initial_Leverage_Short$$

The leverage on Long positions may be increased twice during the lifetime of a market signal if AMS deems the market signal to be reinforced. Each increase would lead to an AMS rebalancing (see Phase 2). The additional exposure will target an incremental increase, relative to its initial exposure factor (with a maximum leverage on long positions capped at twice its initial exposure factor on any AMS rebalancing implementing an increase). The concept of leverage increase only applies to long positions. The leverage on short positions cannot be increased during the lifetime of a market signal, it remains fixed at its initial level during the full duration of the market signal.

- Phase 2: AMS rebalancing:

Once a market signal is validated, AMS will rebalance its asset allocation by going long or short the Underlying Component or stay in cash. When a market signal ends, AMS rebalances fully into cash.

AMS keeps monitoring the strength of the prevailing market signal and, should AMS deem the market signal to be reinforced, a new AMS rebalancing may take place and the leverage is increased (applicable to long positions only).

AMS fixes stop loss and target gain conditions and apply them to the market signal. As soon as one of those conditions is met AMS will deem the market signal to be over. In such a case an AMS rebalancing would occur, and the AMS allocation would return to 100% cash.

3 Index Calculation

3.1 Definition

- Q_t^{close} is the quantity of underlying component i as of the close of t as defined in section 3.2.5
- Q_t^{open} is the quantity of underlying component i as of the open of t as defined in section 3.2.4
- Div_t is the aggregate net cash dividend, as displayed on Refinitiv, after the deduction of the Withholding Tax Rate if any, and attached to the Underlying Component for which Calculation Date t is the Ex-Date. If an Ex-Date occurs on a date that is not a Calculation Date, such Ex-Date is deemed to occur on the first Calculation Date immediately following such date.
- UCL_t is the Underlying Component Level expressed in the currency of the index (as per table 3) and adjusted for potential dividend
- R_t is the level of the interest rate on t , as defined in table 3. If such rate dated as of t is missing, it means the latest rate available
- $Spread_1$ is a funding spread applied when the Index takes a leveraged exposure to the Underlying Component
- $Spread_2$ is a funding spread applied when the Index takes a short exposure to the Underlying Component
- FX_t is in respect of a Underlying Component and a Calculation Date t , the foreign spot exchange rate to convert in the currency of the index (as per table 3) one unit of the Underlying Component currency obtained using the WM Reuters Rate displayed on the Bloomberg page “WMCO” on such Calculation Date, 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
- t_{CB} is with respect to an underlying component the Underlying Component Base Date.
- S_t^{close} is the Underlying Component spot price of the Underlying Component on day t expressed in local currency as displayed under the field Close on Refinitiv
- S_t^{open} is the Underlying Component spot price of the Underlying Component on day t expressed in local currency as displayed under the field Open on Refinitiv
- $IL(t)$ is the official Index Level on t
- t_0 is the index launch date
- AC is the Index advisory cost
- W_t^{close} is the target exposure included in the *trading_on_close* allocation notice on t
- W_t^{open} is the target exposure included in the *trading_on_open* allocation notice on t
- *open_cut_off_time* is the applicable cut-off time as defined in table 4
- *close_cut_off_time* is the applicable cut-off time as defined in table 4
- Allocation Notice is any notice sent by the Allocation Provider to the Index Calculation Agent which includes the type of order (*trading_on_close* or *trading_on_open*), the date on which the allocation should be implemented and the new weight allocated to the Underlying Component which should be implemented.
trading_on_close allocation notice will be considered as valid if they are received by the Index Calculation Agent in the correct pre-agreed format before the *close_cut_off_time*
trading_on_open allocation notice will be considered as valid if they are received by the Index Calculation Agent in the correct pre-agreed format before the *open_cut_off_time*

- *open_disrupted_day* means, in relation to an Underlying Component, any Calculation Date t on which there is a suspension or restriction of trading or any event that disrupts or impairs the ability of market participants to effect transactions in, or obtain market values for, the Underlying Component during the Open trading session
- *close_disrupted_day* means, in relation to an Underlying Component, any Calculation Date t on which there is a suspension or restriction of trading or any event that disrupts or impairs the ability of market participants to effect transactions in, or obtain market values for, the Underlying Component during the Close trading session
- C_t is the Calculation Date strictly preceding t during which the last valid notice received was implemented with respect to an Underlying Component
- W_{C_t} is, with respect to an Underlying Component, the last target exposure received in a valid allocation notice and implemented on C_t

3.2 Index Calculation formula

3.2.1 Determination of the Underlying Component Level

If $t > t_{CB}$,

$$UCL_t^{close} = UCL_{t-1}^{close} \times \left(\frac{S_t^{close} + Div_t}{S_{t-1}^{close}} \times \frac{FX_t}{FX_{t-1}} \right)$$

$$UCL_t^{open} = UCL_{t-1}^{close} \times \left(\frac{S_t^{open} + Div_t}{S_{t-1}^{close}} \times \frac{FX_t}{FX_{t-1}} \right)$$

Otherwise, $UCL_t^{close} = 1000$

3.2.2 Basket Level

On each Calculation Date t in respect to an Underlying Component, the Basket level ($BL(t)$) is computed using the formula below.

If $t = t_0$,

$$BL_{t_0} = 1000$$

Else,

$$BL_t = BL_{t-1} + Q_{t-1}^{close} \times (UCL_t^{open} - UCL_{t-1}^{close}) + Q_t^{open} \times (UCL_t^{close} - UCL_t^{open})$$

$$+ (BL_{t-1} - Q_{t-1}^{close} \times UCL_{t-1}^{close}) \times R_{t-1} \times \frac{ACT(t-1, t)}{360}$$

$$- \max(0; Q_{t-1}^{close} \times UCL_{t-1}^{close} - BL_{t-1}) \times Spread_1 \times \frac{ACT(t-1, t)}{360}$$

$$- \max(0; -Q_{t-1}^{close} \times UCL_{t-1}^{close}) \times Spread_2 \times \frac{ACT(t-1, t)}{360}$$

3.2.3 Index Level

On each Calculation Date t in respect to an Underlying Component, the AMS Index level (IL_t) is computed using the formula below.

If $t = t_0$,

$$IL_{t_0} = 1000$$

Else,

$$IL_t = \text{Max} \left(0, IL_{t-1} \times \left(\frac{BL_t}{BL_{t-1}} - AC \times \frac{ACT(t-1, t)}{360} \right) \right)$$

3.2.4 Q_t^{open} computation

If a valid *trading_on_open* allocation notice has been received for t and t is not an *open_disrupted_day*,

$$Q_t^{open} = \frac{BL_{t-1}}{UCL_{t-1}^{close}} \times W_t^{open}$$

Else, if $BL_{t-1} \leq (1 - \text{Rebalancing_Trigger}) \times BL_{C_t}$,

$$Q_t^{open} = \frac{BL_{t-1}}{UCL_{t-1}^{close}} \times W_{C_t}$$

Otherwise,

$$Q_t^{open} = Q_{t-1}^{close}$$

3.2.5 Q_t^{close} computation

If a valid *trading_on_close* allocation notice has been received for t and t is not a *close_disrupted_day*,

$$Q_t^{close} = \frac{BL_{t-1}}{UCL_{t-1}^{close}} \times W_t^{close}$$

Otherwise,

$$Q_t^{close} = Q_t^{open}$$

3.3 Stop Loss event

With respect to an AMS Index, a Stop Loss Event will occur if on any Calculation Date (the “Stop Loss Date”), the Index Calculation Agent determines that the official Index level IL_t (determined as described in this methodology) is less than or equal to $(100\% - \text{Stop_Loss})$ of IL_{t_0} . For the avoidance of doubt, this Stop Loss Event can only occur with respect to Index Levels calculated after the Index Start Date. Following the stop loss event, the exposure to the underlying component will be set to 0 and a special Index Committee will be convened to discuss the possibility to cease publication of the Index.

3.4 Calculation Date

In respect of an AMS Index, a Calculation Date means any day other than a Saturday or a Sunday on which the Underlying Component of the AMS Index is open for trading and which is not a half trading day for the Underlying Component.

3.5 Rounding of Data

Indices values are computed with all decimals available and are published with 3 decimals.

3.6 Calculation frequency and dissemination

The Index is calculated and published once a day on every Calculation Date.

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.

4 Index Governance

4.1 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.

4.2 Index Calculation Agent

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

4.3 Index Committees – Supervisor

Compass Financial Technologies (France) 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 Compass AMS 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.

Compass AMS 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 from other entities. The Steering Committee may include individuals or representatives of companies, academics, external counsels, or market participants.

The Steering Committee assembles once a year in October. 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 November 2023 are:

- Edouard Mouton, Compass Financial Technologies
- Guillaume Le Fur, Compass Financial Technologies
- Yann Besnard, Amington Management SAS

As of November 23rd, 2023, Guillaume Le Fur chairs the Steering Committee.

5 Methodology applicable

The Index is computed and maintained in accordance with this Methodology and the *Index Adjustment and Disruption Policy* (www.compassft.com/Index_Adjustment_and_Disruption_Policy.pdf). In the event of any inconsistency between the *Index Adjustment and Disruption Policy* and the Index Methodology, the Index Methodology shall prevail.

6 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.

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.

7 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.

The Index is built from input data that is not interpolated, extrapolated or adjusted. In case of lack of data, the last available data is employed.

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.

8 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 every 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.

9 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.

Appendix: AMS parameters

AMS Indices - Parameters							
Index	Currency	R_t	Spread 1	Spread 2	AC	t_{CB}	t_0
AMSSPY	USD	SOFFRATE	0.3%	0.3%	1.2%	12/06/2007	22/11/2023

Table 3: AMS - Adaptive Market Strategy Indices

AMS Indices - Parameters		
Index	Applicable cut-off time for Trading On Open Allocation Notice on t: <i>open_cut_off_time</i>	Applicable cut-off time for Trading On Close Allocation Notice on t: <i>close_cut_off_time</i>
AMSSPY	8:20 am EST on t	2:20 pm EST on t

Table 4: AMS - Adaptive Market Strategy Indices

AMS Indices - Parameters		
Index	<i>Maximum_Initial_Leverage_Long</i>	<i>Maximum_Initial_Leverage_Short</i>
AMSSPY	143%	143%

Table 5: AMS - Adaptive Market Strategy Indices

AMS Indices - Parameters		
Index	<i>Minimum_Initial_Leverage_Long</i>	<i>Minimum_Initial_Leverage_Short</i>
AMSSPY	40%	40%

Table 6: AMS - Adaptive Market Strategy Indices

AMS Indices - Parameters		
Index	Rebalancing_Trigger	Stop Loss
AMSSPY	15%	90%

Table 7: AMS - Adaptive Market Strategy Indices

10 Disclaimer

Nothing contained herein shall constitute or shall be deemed to constitute a financial, legal, tax or other advice of any kind, or a solicitation to purchase, sell or invest in any financial products or to engage in any financial strategy. Compass Financial Technologies SA or any of its affiliates (“Compass”) (i) does not guarantee the adequacy, the accuracy, the timeliness, the completeness, the evolution and/or the movements of its indices or any data included therein (the “Indices” or the ”Index”), (ii) shall not have any liability for any errors, omissions, delays or interruptions therein and (iii) makes no warranty, express or implied, as to results to be obtained by owners of any securities, or by any other person or entity from the use of the Indices. Compass does not make any express or implied warranties, and expressly disclaims, all warranties of merchantability or fitness for a particular purpose or use with respect to the Indices. Without limiting any of the foregoing, in no event shall Compass have any liability for any lost profits or indirect, punitive, special or consequential damages or losses, even if notified of the possibility thereof.



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