

# The SS&C GlobeOp Hedge Fund Index<sup>®</sup> includes the SS&C GlobeOp Capital Movement Index, SS&C GlobeOp Hedge Fund Performance Index and SS&C GlobeOp Forward Redemption Indicator

### Summary of Methodology

The SS&C GlobeOp Hedge Fund Index (the Index) is a family of rules-based, non-investable indices published monthly. It includes the SS&C GlobeOp Capital Movement Index which reports capital activity; the SS&C GlobeOp Hedge Fund Performance Index which reports hedge fund returns; and the SS&C GlobeOp Forward Redemption Indicator which reports projected capital outflows. Each is described below.

**SS&C GlobeOp Capital Movement Index** reports the net of subscriptions and redemptions processed monthly by SS&C GlobeOp for hedge funds administered by the firm on the SS&C GlobeOp platform. This index is expressed as a percentage of the ending aggregate net asset value (NAV) of the funds in the previous month.

SS&C GlobeOp Hedge Fund Performance Index reports aggregate asset-weighted performance of funds administered by SS&C GlobeOp on the SS&C GlobeOp platform. SS&C GlobeOp reports gross and net performance, the former net of management fees and the latter net of management fees and incentive fees.

**SS&C GlobeOp Forward Redemption Indicator** reports projected capital outflows. It is the sum of forward redemption requests as a percentage of the ending aggregate NAV of the funds in the previous month.

The SS&C GlobeOp Hedge Fund Index does not report capital activity and performance for funds for which SS&C GlobeOp performs only a subset of its services without full administration, e.g., middle and back office, valuations or stand-alone risk services. The Index does not include the capital activity and performance of funds of funds, terminated funds and funds with suspended NAVs during the month. In addition, the SS&C GlobeOp Hedge Fund Performance Index does not include managed accounts, funds launched during the month and funds with daily, weekly or quarterly NAV production. Managed account platforms administered by SS&C GlobeOp on the GlobeOp platform are included in the Capital Movement Index and the Forward Redemption Indicator, but only at the platform level. Managed account platforms administered by SS&C GlobeOp on the SS&C GlobeOp platform are not included in the SS&C GlobeOp Hedge Fund Performance Index due to the multiple levels of the structures which currently preclude the timely release of performance results.

#### **OBJECTIVE**

The objective of the SS&C GlobeOp Hedge Fund Index is to present data relating to the performance of and capital activity into and out of hedge funds administered by SS&C GlobeOp on the SS&C GlobeOp platform. Although the SS&C GlobeOp Capital Movement Index does include infrequent manager-initiated payouts, this index is broadly reflective of investor sentiment in a significant segment of the hedge fund sector.

#### PRINCIPLES OF INDEX CONSTRUCTION

The SS&C GlobeOp Hedge Fund Index and all its components are constructed with several key principles in mind: a hedge fund index should be based on fixed non-discretionary rules and be independent, transparent, representative, anonymous, timely and accurate.

#### Fixed and non-discretionary

The criteria by which funds are selected for the Index are defined by a clear set of rules and overseen by a qualified and experienced committee.

#### Independent

SS&C GlobeOp independently processes all cash flows, valuations and capital activity included in the Index. Fund managers do not report their own investment flows or performance, eliminating the selection bias found in many other indices which rely on optional data reporting. SS&C GlobeOp does provide a flash estimate of its SS&C GlobeOp Hedge Fund Performance Index which may use inputs from individual managers, but the interim and final SS&C GlobeOp Hedge Fund Performance Index values are based only on inputs independently calculated and/or verified by SS&C GlobeOp.

#### Transparent

The methods by which SS&C GlobeOp constructs and maintains the SS&C GlobeOp Hedge Fund Index are fully and publicly disclosed.

Principles of construction - continued

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#### Representative and anonymous

We believe that an index should be representative of assets currently invested in the sector. As an aggregate measure, it should also preserve the anonymity of individual client data. SS&C GlobeOp's total assets under administration (AuA) on the SS&C GlobeOp platform represent approximately 10% of the estimated assets currently invested in the hedge fund sector. The investment strategies of the funds in the indices contain a large enough set of funds to facilitate anonymity.

#### Timely and accurate data

The integrity of the Index depends on accurate and timely reporting. Our team of analysts performs rigorous quality analysis of monthly data of the constituent hedge funds. Index data is based on the same fund data SS&C GlobeOp uses to produce NAVs. The production of NAVs is included in SS&C GlobeOp's annual Service Organization Control (SOC)1, in accordance with SSAE No. 16 and the ISAE 3402 examination. All capital activity and profit and loss (P&L) are confirmed independently by SS&C GlobeOp. All capital movements and fund P&Ls are converted to US dollar (USD) equivalents at the spot exchange rate for USD per unit of the fund's currency at the end of the respective month.

#### **Currency hedged**

The SS&C GlobeOp Hedge Fund Index is calculated and represented in US dollars. Performance of a range of non-USD denominated funds, classes or series are formulaically hedged against currency fluctuations of the relevant non-USD currency in relation to the USD.

#### **INCEPTION DATE AND BASE MARKET VALUE**

The inception date of the SS&C GlobeOp Hedge Fund Index excluding the Forward Redemption Indicator is 1 January 2006. The base market value of the SS&C GlobeOp Capital Movement Index and SS&C GlobeOp Hedge Fund Performance Index at inception was set at 100. The SS&C GlobeOp Forward Redemption Indicator is reported from January 2008 with no base value.

#### **CALCULATION AND DISSEMINATION OF INDEX VALUES**

On the 9th business day of each month, the SS&C GlobeOp Capital Movement Index offers a view of investments, or capital movements, into and out of hedge funds administered by SS&C GlobeOp on the SS&C GlobeOp platform. Data is based on actual subscriptions and redemptions received and independently processed and published only a few business days after they occur.

Also on the 9th business day of each month, a flash estimate of the SS&C GlobeOp Hedge Fund Performance Index is published for the prior month. Unlike the interim and final index values, the flash estimate may use inputs provided by managers and is reviewed by SS&C GlobeOp analysts for coherence and consistency.

On the 9th business day of the second month, an interim value is reported for the Hedge Fund Performance Index.

It is based on inputs independently calculated and/or verified by SS&C GlobeOp. On the 9th business day of the third month, a final value is reported. The flash estimate is reported on a gross basis, i.e., net of management fees but not incentive fees. The interim and final estimates are reported on a gross as well as net basis, i.e., net of management fees and incentive fees.

On the 15th business day of each month, the SS&C GlobeOp Forward Redemption Indicator reports redemption notifications received from investors in hedge funds administered by SS&C GlobeOp on the SS&C GlobeOp platform. Data is based on actual redemption notices received. Investors may, and sometimes do, cancel redemption notices. Unlike subscriptions, redemption notifications are typically received 30 to 90 days in advance of the redemption date, depending on individual fund redemption notice requirements.

#### **INDEX COMMITTEE**

The SS&C GlobeOp Hedge Fund Index Committee is responsible for constructing the rules of the Index, maintaining the Index, and determining any changes to the rules or constitution of the Index. The Index Committee is composed of members of SS&C GlobeOp's Investor Analytics Group along with senior executives of the firm.

#### **DEFINITIONS**

- Subscriptions (Subs): New investment either by new and returning investors or by current investors adding to their holdings
- Redemptions (Reds): Payout of capital to fund investors
- Forward Redemptions: Redemptions for future months, estimated from the redemption requests received by SS&C GlobeOp
- NAVs: The current market valuation of assets and liabilities, adjusted for expenses and net of fees as of the end of an accounting period
- AuA: The sum of the assets under administration for all funds administered by SS&C GlobeOp
- Funds administered by SS&C GlobeOp: Funds for which SS&C GlobeOp performs net asset valuations (NAV) on the SS&C GlobeOp platform
- Flash P&L: The best available estimate of gross profit and loss of all the funds included in the Index
- Final Gross P&L: The gross profit and loss of all the funds included in the Index minus management fees and other expenses, but without subtraction of performance fees
- Final Net P&L: The gross profit and loss of all the funds included in the Index minus management fees and performance fees

Detailed summary - continued

#### **INDEX COMPONENTS**

#### **Subscriptions and Redemptions**

All subscriptions and redemptions that have been or will be processed from the 16th calendar day of the prior month until the 15th calendar day of the present month are included in the Index.

For funds with gates, redemption requests that exceed the gated number are included only up to the permissible redemption value. Although the majority of subscriptions and redemptions are known by the 5th business day, there may be exceptional cases in which late subscriptions and redemptions are permitted by the fund. Subscriptions and redemptions published for the Index may therefore differ from the final numbers.

#### AuA

The Index includes the total AuA of all funds administered by SS&C GlobeOp on the SS&C GlobeOp platform. It does not include managed accounts where there is no administration mandate, but does include funds administered by SS&C GlobeOp on the SS&C GlobeOp platform that may invest in managed accounts. Fund of hedge funds are excluded from the Index effective January 2012 since they may invest in other funds administered by SS&C GlobeOp on the SS&C GlobeOp platform and thereby result in double counting of investment flows. Previously published numbers will not be restated, since the impact of this change is not material. There is no minimum AuA in order to be included in the Index. Funds in liquidation or transfer are reported up until the last completed month-end.

#### **Forward Redemptions**

Data is based on actual redemption notices received. Investors may, and sometimes do, cancel redemption notices. Unlike subscriptions, redemption notifications are typically received 30 to 90 days in advance of the redemption date, depending on individual fund redemption notice requirements. In addition, the establishment and enforcement of redemption notification deadlines may vary from fund to fund. Index data can be further segmented by redemption periods ranging from less than one month to more than three months.

#### **Monthly Profit and Loss**

Monthly profit and loss may be expressed in gross terms, i.e., net of direct expenses including management fees but not incentive fees (gross P&L); or in net terms, i.e., net of all direct expenses and fees (net P&L).

#### **Capital Movement Index components**

The SS&C GlobeOp Capital Movement Index is calculated on the basis of subscription and redemption notifications from hedge funds administered by SS&C GlobeOp on the SS&C GlobeOp platform, divided by the estimated AuA for the prior month.

Index data can be segmented by a range of gross and net monthly flow criteria.



#### **Hedge Fund Performance Index components**

The SS&C GlobeOp Hedge Fund Performance Index consists of the monthly profit or loss as a percentage of the month's opening NAV. Flash performance is published on the 9th business day of the first month based on the best available gross P&L estimates for the prior month; gross and net interim performance are published on the second month; and gross and net final performance are published in the third month.

#### **Forward Redemption Indicator components**

The SS&C GlobeOp Forward Redemption Indicator consists of actual redemption notifications received from investors for hedge funds administered by SS&C GlobeOp on the SS&C GlobeOp platform, divided by the estimated AuA for hedge funds administered by SS&C GlobeOp on the SS&C GlobeOp platform.

#### APPENDIX – CALCULATIONS

This section describes the formulae used to calculate the following indices in the SS&C GlobeOp Hedge Fund Index:

- 1. SS&C GlobeOp Capital Movement Index
- 2. SS&C GlobeOp Hedge Fund Performance Index
- 3. SS&C GlobeOp Forward Redemption Indicator

#### 1. SS&C GlobeOp Capital Movement Index

This index represents the capital movement as a percentage of the current month-end's estimated AuA with 1 January 2006 AuA as the base set at 100.

Capital Movement Index (Monthly) = 
$$\frac{(Subs_{T_1} - Reds_{T_1})}{AuA_{T_0}}$$

Where:

 $T_0 =$ Previous month-end

 $T_1$  = Current month-end

 $\mathrm{AuA}_{\mathrm{T}_0}$  includes net capital movement on 1st business day of the current month

#### **Capital Movement Index (Cumulative)**

$$=100+\Sigma \left[\frac{\left(\text{Subs-Reds}\right)_{T_1}}{\text{AuA}_{T_0}} + \frac{\left(\text{Subs-Reds}\right)_{T_2}}{\text{AuA}_{T_1}} + ... \frac{\left(\text{Subs-Reds}\right)_{T_n}}{\text{AuA}_{T_{n-1}}}\right]$$

Appendix - continued

#### Estimation of the current month capital activity:

The month-end capital activity is estimated on the 5th business day of the current month for a date range from the 16th of the prior month to the 15th of the current month because occasionally redemptions are processed outside the month-end time frame. Hence, the "current month-end" refers to the entire period from day 16 of the previous month to day 15 of the current. Redemptions occurring between the 6th and 15th business days of the current month that are known at the time of the publication of the Index will be accounted for during the publication of this month's Capital Movement Index. Redemptions occurring between the 6th and 15th not known at the time of the publication of this index will result in a revision of the current month-end index number. In practice, these revisions tend to be very infrequent and immaterial.

#### Estimation of current month-end AuA:

The month-end AuA is estimated on a best basis with information available as of the 5th business day of the current month.

The estimated AuA for a given month-end (e.g., January 31 / February 1) does not include the P&L generated during the prior month (January).

#### 2. SS&C GlobeOp Hedge Fund Performance Index

This index represents the monthly profit or loss as a percentage of the month's opening NAV. The initial flash estimate in the first month is calculated on aggregate fund performance, followed by interim and final values in the second and third months, respectively. The initial flash estimate is reported on a gross basis – net of management but not incentive fees. The interim and final estimates are reported on gross and net bases – net of management and incentive fees.

#### **Hedge Fund Performance Index (Cumulative)**

$$R = \left[ \prod_{i=1}^{n} \left( 1 + \frac{r_i}{100} \right) - 1 \right] * 100$$

R = cumulative performance n = number of observations  $r_i = i_{th}$  return



#### Estimation of Profit & Loss:

Aggregate gross flash P&L is published based on the best available gross P&L estimates for the month ended. Aggregate gross and net P&L are calculated for the same month in the second and third months to estimate interim and final performance, respectively, with improved accuracy.

#### Estimation of Assets under Administration:

Beginning AuA is calculated by aggregating the previous month's ending AuA and adding the aggregate net capital movement that occurs on the 1st business day of the month.

#### 3. SS&C GlobeOp Forward Redemption Indicator

This index represents the sum of forward redemption requests as a percentage of the ending aggregate NAV of the funds in the previous month.

#### **Forward Redemption Indicator**

$$= \!\! \Sigma (\mathsf{FRed}_{\mathsf{M}_1} + \mathsf{FRed}_{\mathsf{M}_2} + \mathsf{FRed}_{\mathsf{M}_3} + \mathsf{FRed}_{\mathsf{M}_3 + \mathsf{M}_4 + \mathsf{M}_5 + .})$$

#### Where:

$$FRed_{M_1} = \frac{(\Sigma Reds_{T_1})}{AuA_{T_0}}$$

$$\mathsf{FRed}_{\mathsf{M}_2} = \frac{(\mathsf{\Sigma}\mathsf{Reds}_{\mathsf{T}_2})}{\mathsf{AuA}_{\mathsf{T}_0}}$$

$$FRed_{M_3} = \frac{(\Sigma Reds_{T_3})}{AuA_{T_0}}$$

$$\mathsf{FRed}_{\mathsf{M_4}^{+\mathsf{M}_5^{+}\dots}} = \ \frac{(\Sigma(\mathsf{RedsT4+\,RedsT5+}\dots))}{\mathsf{AuAT0}}$$

#### For further information:

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