

Royal Bank of Canada

***RBCSPVRU Strategy Components***

**Strategy Methodology**

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Capital  
Markets

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# Important Information

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## 1. Strategy Administration

The Strategy Administrator appoints the Calculation Agent, which could be an affiliate or an external third party, who has sole discretion over calculation of the Strategy, determination of the inputs necessary to calculate the Strategy and how the Strategy Methodology is applied. It reserves the right to modify, temporarily suspend, or discontinue the Strategy at any time without notice. In certain cases, the Strategy Administrator may be required to make subjective decisions. This will be done in good faith and in a commercially reasonable manner, but, in all cases, is at the sole discretion of the Strategy Administrator.

The Strategy Administrator may cease to administer the Strategy at any time. It may also, at any time, transfer its responsibilities to another party of its choice which could be an affiliate or an external third party.

The Strategy Administrator's determinations with respect to any calculations made by the Calculation Agent and any interpretation and/or application of the Strategy Methodology, are final and binding.

The Strategy Administrator may assign the performance of calculations hereunder to any person or entity, including an affiliate of the Strategy Administrator.

The Strategy Administrator does not guarantee the accuracy, completeness, timeliness or availability of the information contained herein, and is not responsible for any errors or omissions, regardless of the cause. The Strategy Administrator does not make any representation as to the potential success or anticipated results of any transaction linked to the value of the Strategy. The Strategy Administrator disclaims any and all express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. The Strategy Administrator does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index.

## 2. Changes to Futures Contracts by Listing Exchange

The exchanges may discontinue or suspend calculation or dissemination of information relating to any of the futures contracts comprising the Strategy Components. Any such actions could affect the return of the Strategy. If the situation arises in which the exchanges make changes to, replace, or discontinue a futures contract that is a Strategy Future in the Strategy then the Strategy Administrator reserves the right to take discretionary action to modify the Strategy Methodology. This will be done in good faith and in a commercially reasonable manner, but, in all cases, is at the sole discretion of the Strategy Administrator.

## 3. Calculation Agent

The Calculation Agent is responsible for calculating the Strategy in accordance with the Strategy Methodology.

The Calculation Agent does not guarantee the accuracy, completeness, timeliness or availability of the information contained herein, and is not responsible for any errors or omissions, regardless of the cause. The Calculation Agent does not make any representation as to the potential success or anticipated results of any transaction linked to the value of the Strategy. The Calculation Agent disclaims any and all express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. The Calculation Agent does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index.

#### 4. Potential conflicts of interest

In certain circumstances, the Strategy Administrator's role as a subsidiary of Royal Bank of Canada and its responsibilities with respect to the Strategy could give rise to conflicts of interest. Even though the Strategy will be calculated in accordance with certain principles, its calculation and maintenance require that certain judgments and decisions be made. The Strategy Administrator will be responsible for these judgments and decisions.

Further, the Strategy Administrator faces a potential conflict of interest between its role as the Strategy Administrator and its active role in trading commodities and derivatives instruments based upon the components of the Strategy.

#### 5. Disclaimer

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## Introduction

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The information presented in this document (the “Strategy Methodology”) describes the general methodology for determining the composition and calculation of the Strategy.

The Strategy is comprised of components, with each component referencing a rolling futures exposure. The basket composition is updated periodically by applying a weighting rebalance methodology.

# Strategy Methodology Definitions

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In this document, the following capitalized terms shall have the meanings ascribed opposite to them, unless otherwise stated.<sup>1</sup>

**Base Level of the Strategy** is the Strategy value chosen for the First Calculation Day of the Strategy.

**Calculation Agent** means RBC Dominion Securities, Inc.

**Contract Month** is a particular futures contract for a Strategy Future.

**First Calculation Day of the Strategy** is the first day on which the calculation of the Strategy begins.

**Market Disruption Event** or **MDE** has the meaning ascribed to it in the Strategy Methodology.

**Rebalance Weight** refers to the weight of a particular Strategy Component at a given time, defined in the Strategy Methodology.

**Strategy** is a rules based procedure for constructing an investment portfolio.

**Strategy Administrator** means RBC Capital Markets, Inc.

**Strategy Business Day** means any weekday that is not an NYSE holiday.

**Strategy Component** is a component strategy referenced by the Strategy. Correspondingly defined are the **FX Rate**, **First Calculation Day of the Strategy Component**, and the **Base Level of the Strategy Component**.

**Strategy Composition** refers to the particular collection and proportion of Strategy Components referenced within the Strategy at a given time.

**Strategy Future** is a component asset within any of the Strategy Components.

**Strategy Methodology** has the meaning ascribed to it in the Introduction.

**Strategy Name** is the phrase used to describe a specific instance of the Strategy.

**Settlement Price** refers to the official settlement price/closing price published by the respective futures exchange for a given futures contract.

**Strategy Ticker** is the Bloomberg symbol for a specific instance of the Strategy.

<sup>1</sup> These definitions shall be equally applicable to both the singular and plural forms of defined terms.

# Strategy Composition Methodology

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This section outlines the methodology used to determine the Strategy Composition.

The following notations and definitions are used to describe the Strategy Composition Methodology. Specific parameters used in the implementation of the Strategy are contained within the Strategy Information.

$N$  - denotes the number of Pairs included in the Strategy.

$n$  - denotes the number of Strategy Components included in the Strategy.

$Pair^i$  - denotes the  $i^{th}$  Pair included in the Strategy. Note that  $1 \leq i \leq N$ .

$UI^{i,c}$  - denotes the component  $c$  of  $Pair^i$ . Note that  $c \in \{Long, Short\}$ .

$UI^j$  - denotes the  $j^{th}$  Strategy Component which is to be allocated a Rebalance Weight. Note that  $1 \leq j \leq n$ .

$WAC(T)$  - denotes the most recent **Weight Assignment Calculation Day** before Strategy Business Day  $T$ . This is the Strategy Business Day on which the Rebalance Weights for all  $UI^j$  are determined.

$\tilde{w}_{WAC(T)}^j$  - denotes the **Rebalance Weight** for  $UI^j$  on Weight Assignment Calculation Day  $WAC(T)$ .

$w^i$  - denotes the weight assigned to the  $i^{th}$  Pair, as defined in the table "Information on Pairs and Weights" of Strategy Information.

$SP_T^{i,c}$  - denotes the **Spot Level** of  $UI^{i,c}$  on Strategy Business Day  $T$ , which is calculated as  $RPV_{FX}^1(T; T)$ , the Reference Portfolio Value with FX as defined in the Strategy Component Calculation section of Strategy Calculation Methodology.

$SR_T^i$  - denotes the **Spot Ratio** in respect of  $Pair^i$ , calculated on Strategy Business Day  $T$  as:

$$SR_T^i = \ln \left( \frac{SP_T^{i,Long}}{SP_T^{i,Short}} \right)$$

$SRZ_T^i$  - denotes the **Spot Ratio Z-Score** in respect of  $Pair^i$ , calculated on Strategy Business Day  $T$  as:

$$SRZ_T^i = \frac{SR_T^i - \frac{1}{252} \sum_{t=1}^{252} SR_{T-t}^i}{\sqrt{\frac{1}{251} \times \sum_{t=1}^{252} \left[ SR_{T-t}^i - \frac{1}{252} \sum_{t=1}^{252} SR_{T-t}^i \right]^2}}$$

On each Weight Assignment Calculation Day  $WAC(T)$ , the following steps are performed:

**Step 1: Calculate Signals**

For each  $1 \leq i \leq N$ , calculate  $SRZ_{WAC(T)}^i$ .

**Step 2: Rank the Signals**

Rank the set  $\{SRZ_{WAC(T)}^i : i = 1, \dots, N\}$  in ascending order. Denote the rank of  $SRZ_{WAC(T)}^i$  by  $Rank_{WAC(T)}^i$ .

**Step 3: Calculate initial weights for each  $UI^{i,c}$**

For each  $1 \leq i \leq N$ , calculate the initial weights  $w_{WAC(T)}^{i,Long}$  and  $w_{WAC(T)}^{i,Short}$  as follows:

$$w_{WAC(T)}^{i,Long} = \begin{cases} w^i, & \text{if } 1 \leq Rank_{WAC(T)}^i \leq 20 \\ 0, & \text{otherwise} \end{cases}$$

$$w_{WAC(T)}^{i,Short} = \begin{cases} -w^i, & \text{if } 1 \leq Rank_{WAC(T)}^i \leq 20 \\ 0, & \text{otherwise} \end{cases}$$

**Step 4: Calculate Rebalance Weights**

For each  $1 \leq j \leq n$ , the Rebalance Weight  $\tilde{w}_{WAC(T)}^j$  for the Strategy Component  $UI^j$  is determined as follows:

$$\tilde{w}_{WAC(T)}^j = \sum_{\substack{i=1 \\ UI^{i,Long}=UI^j}}^N w_{WAC(T)}^{i,Long} + \sum_{\substack{i=1 \\ UI^{i,Short}=UI^j}}^N w_{WAC(T)}^{i,Short}$$

**Delays and Interruptions**

The Weight Assignment Calculation Day and associated Rebalance Date of the Strategy may be postponed due to the lack of timely available input data required to calculate updated Rebalance Weights. In such instances, the Strategy Administrator has sole and absolute discretion to modify Strategy rules to accommodate any such delays or interruptions.



# Strategy Calculation Methodology

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The Strategy is a composition of Strategy Components with the Strategy Composition determined according to the Strategy Composition Methodology. Each Strategy Component holds a dynamic portfolio of futures contracts as specified by the Strategy Methodology.

Note that a date is represented using the convention MM/DD/YYYY and a month is represented using the convention MM/YYYY.

## Strategy Calculation

This section details the calculations used to determine the daily level of the Strategy given the levels of the Strategy Components and other parameters relevant to the Strategy Calculation.

The Strategy is calculated in US Dollars to an accuracy of 8 decimal places and has an initial value of the Base Level of the Strategy on the First Calculation Day of the Strategy, as specified in Strategy Information.

The following terms and notation are used within this section to define the daily Strategy Calculation. Specific parameters used in the implementation of the Strategy are contained within the Strategy Information.

$I_T$  - denotes the level of the Strategy on Strategy Business Day  $T$ .

$n$  - denotes the number of Strategy Components included in the Strategy.

$CD[S, T]$  - denotes the **Calendar Day Count** between dates  $S$  (exclusive) and  $T$  (inclusive).

$UI_T^j$  - denotes the level of the  $j^{th}$  Strategy Component on Strategy Business Day  $T$ . Note that  $1 \leq j \leq n$ .

$R(T)^j$  - denotes the **Rebalance Date** used on Strategy Business Day  $T$  for the  $j^{th}$  Strategy Component.

$w_{R(T)^j}^j$  - denotes the **Rebalance Weight** assigned to the  $j^{th}$  Strategy Component on Rebalance Date  $R(T)^j$ .

$f_T$  - denotes the **Turnover Cost** used on Strategy Business Day  $T$  for the Strategy.

In the absence of a Market Disruption Event, on Strategy Business Day  $T$ , the Strategy level is defined by the following iterative formula, with the final result rounded to the eighth decimal place:

$$I_T = I_{T-1} + \sum_{j=1}^n w_{R(T)^j}^j \frac{I_{R(T)^j}}{UI_{R(T)^j}^j} (UI_T^j - UI_{T-1}^j) - I_{T-1} f_{T-1} \frac{CD[T-1, T]}{365}$$

## Strategy Component Calculation

This section details the calculation of a particular Strategy Component within the Strategy. Specific parameters used in the implementation of the Strategy Component are contained within the Strategy Information.

The Strategy Component is calculated in US Dollars to an accuracy of 8 decimal places and has an initial value of the Base Level of the Strategy Component on the First Calculation Day of the Strategy Component, as specified in Strategy Information.

$CM[T]$  and  $NCM[T]$  - denote the calendar month of date  $T$  and the calendar month immediately following  $CM[T]$ , respectively.

$BD[T; M]$  - denotes the **Business Day Count** of date  $T$  relative to the calendar month  $M$ . When  $T$  occurs on or after the first day of month  $M$ , the Business Day Count is the number of Strategy Business Days between the first day of month  $M$  and the date  $T$ , inclusive. When  $T$  occurs prior to the first day of month  $M$ , the Business Day Count is calculated as  $BD[T; CM[T]] - BD[T_{last}; CM[T]]$ , where  $T_{last}$  is the date immediately prior to the first calendar day of month  $M$ .

$m$  - denotes the number of Strategy Futures included in the Strategy Component.

$HRP^k$  - denotes the **Hedge Roll Period** for the  $k^{th}$  Strategy Future, consisting of a set of integers representing consecutive Business Day Counts, specified in Strategy Information.

$HRW^k(i)$  - denotes the **Hedge Roll Weight** of the  $k^{th}$  Strategy Future for any  $i \in HRP^k$ , specified in Strategy Information.

$FRD^k$  - denotes the **First Roll Day** of the  $k^{th}$  Strategy Future, defined to be the smallest integer in the Hedge Roll Period where the Hedge Roll Weight is not equal to one.

$RefM^k(T)$  - denotes the **Reference Month** of Strategy Business Day  $T$  associated with the  $k^{th}$  Strategy Future, which is defined as follows:

$$RefM^k(T) = \begin{cases} NCM[T] & \text{if } BD[T; NCM[T]] \geq FRD^k \\ CM[T] & \text{else} \end{cases}$$

**Lead Contract Month** - For a given Strategy Future, the **Lead Contract Month** on Strategy Business Day  $T$  is the corresponding futures contract based on the Reference Month of  $T$  in the Contract Months table in Strategy Information.

**Next Contract Month** - For a given Strategy Future, the **Next Contract Month** on Strategy Business Day  $T$  is the corresponding futures contract based on the month immediately following the Reference Month of  $T$  in the Contract Months table in Strategy Information.

$P_1^k(T)$  and  $P_2^k(T)$  - denote the Settlement Prices of the Lead Contract Month and the Next Contract Month of the  $k^{th}$  Strategy Future on Strategy Business Day  $T$ , respectively.

$ARW^k(T)$  - denotes the **Actual Roll Weight** for the  $k^{th}$  Strategy Future on Strategy Business Day  $T$ , defined in the following formula:

$$ARW^k(T) = \begin{cases} HRW^k(FRD^k - 1), & \text{if } \min(1, FRD^k - 1) \leq BD[T; RefM^k(T)] \leq FRD^k - 1 \\ HRW^k(BD[T - 1; RefM^k(T)]), & \text{else if } BD[T - 1; RefM^k(T)] \in HRP^k \\ ARW^k(T - 1), & \text{else} \end{cases}$$

$RPV^k(S; T)$  - denotes the **Reference Portfolio Value** for the  $k^{th}$  Strategy Future on Strategy Business Day  $T$  with Settlement Prices from Strategy Business Day  $S$ , defined as:

$$RPV^k(S; T) = ARW^k(T)P_1^k(S) + [1 - ARW^k(T)]P_2^k(S)$$

$FX_T$  - denotes the foreign exchange spot price as defined in the table "FXRate, First Calculation Day, and Base Level of the Strategy Components" in Strategy Information, fixed at 16:00 London time on Strategy Business Day  $T$ . If the FX Rate is not applicable,  $FX_T = 1$ .

$RPV_{FX}^k(S; T)$  - denotes the **Reference Portfolio Value with FX** for the  $k^{th}$  Strategy Future on Strategy Business Day  $T$  with Settlement Prices from Strategy Business Day  $S$ , defined as:

$$RPV_{FX}^k(S; T) = FX_S \times RPV^k(S; T)$$

$ER_T$  - denotes the **Excess Return level** on Strategy Business Day  $T$ . Let  $T_0$  be the First Calculation Day of the Strategy Component and  $ER_{T_0}$  be the starting value, equal to the Base Level of the Strategy Component. For any Strategy Business Day  $T$  following  $T_0$ ,  $ER_T$  is defined by the following iterative formula, with the final result rounded to the eighth decimal place:

$$ER_T = ER_{T-1} \frac{\sum_{i=1}^m RPV^k(T; T)}{\sum_{i=1}^m RPV^k(T-1; T)}$$

The Composition Weight for each Contract Month of the  $k^{th}$  Strategy Future on Strategy Business Day  $T$  is defined as the following:

$$\begin{cases} CW_1^k(T) = ER_{T-1} \frac{RPW_1^k(T)ARW^k(T)}{\sum_i RPV^k(T-1; T)} & \text{for Lead Contract Month} \\ CW_2^k(T) = ER_{T-1} \frac{RPW_2^k(T)[1 - ARW^k(T)]}{\sum_i RPV^k(T-1; T)} & \text{for Next Contract Month} \end{cases}$$

Let  $T_0$  be the First Calculation Day of the Strategy Component and  $UI_{T_0}$  be the Base Level of the Strategy Component. On any Strategy Business Day  $T$  following  $T_0$ , the Strategy Component level is defined by the following iterative formula, with the final result rounded to the eighth decimal place:

$$UI_T = UI_{T-1} + \frac{FX_T}{FX_{T-1}} \frac{UI_{T-1}}{ER_{T-1}} (ER_T - ER_{T-1})$$

## Calculation and Publication of the Strategy

The Strategy will be calculated and published on each Strategy Business Day by 5:00pm EST. If any relevant information regarding Strategy Futures or Components is not available by 5:00pm EST the Calculation Agent will follow the Adjustment Protocol outlined below.

## Adjustment Protocol

In the event that the Strategy Administrator or the Calculation Agent determines that the calculation of the Strategy is not accurate (i.e., does not reflect the value of its underlying components), the Calculation Agent may (including on instruction of the Strategy Administrator) make such adjustments to the calculation of the Strategy as it reasonably believes necessary to re-establish the Strategy Level as an accurate reflection of the underlying variables used in calculating the Strategy. Such adjustments include, but are not limited to, adjustments to the Strategy Components, the Strategy Futures underlying the Strategy Components, and/or any other variable of the Strategy contained herein. The effective date of any such adjustment shall be determined by the Calculation Agent. The circumstances in which the Calculation Agent and/or the Strategy Administrator may make such adjustments include, but are not limited to, the data on which the calculation rests (whether provided by a 3<sup>rd</sup> party or not).

## Market Disruption Events

A “*Market Disruption Event*” (also referred to as “MDE”) is any event, circumstance or cause that the Strategy Administrator determines could have a material adverse effect on a market participant’s ability to take a position in the futures contracts necessary to replicate the Strategy. More specifically, this may include, without limitation, any of the following events to the extent that they have such effect:

- Trading in one or more futures contracts that are part of the Strategy is suspended because the closing or settlement price of the futures contract is at the upper or lower limit of the range of prices within which the closing or settlement price of such futures contract may fluctuate as established by the applicable exchange (i.e. a “limit up” or “limit down” price has occurred).
- The daily Settlement Prices for one or more futures contracts that are part of the Strategy are not available, or the applicable exchange does not, for any reason, announce, report or publish the information necessary for determining the official daily settlement price for such futures contract.
- Any material suspension, halt, stoppage, or delay in trading in one or more futures contracts that are part of the Strategy.
- Any change (i) in law or regulation (including, without limitation, any tax law) or (ii) in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), that the Strategy Administrator determines, in its sole and absolute discretion, (A) makes it illegal to hold, acquire or dispose of any hedge position in respect of the Strategy or (B) results in a material increase in the cost associated with performing obligations in relation to the Strategy (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on the tax position of the Issuer or any of its affiliates or agents).
- Any other circumstance that could lead to a material and/or extraordinary increase in the cost to acquire, establish, re-establish, substitute, maintain, unwind, or dispose of any transaction or asset used for hedging the Strategy or to realize, recover, or remit the proceeds of any such transaction or asset.

The Strategy Administrator is responsible for determining whether a Market Disruption Event has occurred. Under such circumstances when a Market Disruption Event has occurred, the Strategy Administrator shall, in its sole discretion, determine the appropriate course of action, which may include, but is not limited to, the suspension or discontinuance of the Strategy and any constituent thereof, its publication or calculation. Any such action by the Strategy Administrator may be without notice.

## Strategy Information

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The section contains the specific parameters and specifications of the Strategy and associated Strategy Components.

### Strategy Specification

**Strategy Name:** RBCSPVRU Index – Week 1

**First Calculation Day of the Strategy:** 02/28/2007

**Base Level of the Strategy:** 100

**Turnover Cost:** 0

**Weight Assignment Calculation Day:** Last Strategy Business Day of the week, every four weeks starting from 02/16/2007, unless otherwise specified

### Information on Pairs and Weights

Pair - Long	Pair - Short	Sector	Weight
Silver	Gold	Precious Metals	5%
Platinum	Gold	Precious Metals	5%
Copper	Aluminium	Industrial Metals	5%
Nickel	Aluminium	Industrial Metals	5%
Nickel	Lead	Industrial Metals	5%
Lead	Zinc	Industrial Metals	5%
Brent Crude Oil	WTI Crude Oil	Energy	7%
Brent Crude Oil	Heating Oil	Energy	7%
Heating Oil	WTI Crude Oil	Energy	7%
RBOB	WTI Crude Oil	Energy	7%
RBOB	Brent Crude Oil	Energy	7%
Corn	Wheat	Grains	4%
Soybeans	Corn	Grains	4%
Soybeans	Bean Oil	Grains	4%
Soybean Meal	Soybeans	Grains	4%
Soybean Meal	Bean Oil	Grains	4%
White Sugar	Sugar	Softs	5%
London Cocoa	Cocoa	Softs	5%
Live Cattle	Lean Hogs	Livestock	2.5%
Feeder Cattle	Lean Hogs	Livestock	2.5%
Gold	Silver	Precious Metals	5%
Gold	Platinum	Precious Metals	5%
Aluminium	Copper	Industrial Metals	5%
Aluminium	Nickel	Industrial Metals	5%

Lead	Nickel	Industrial Metals	5%
Zinc	Lead	Industrial Metals	5%
WTI Crude Oil	Brent Crude Oil	Energy	7%
Heating Oil	Brent Crude Oil	Energy	7%
WTI Crude Oil	Heating Oil	Energy	7%
WTI Crude Oil	RBOB	Energy	7%
Brent Crude Oil	RBOB	Energy	7%
Wheat	Corn	Grains	4%
Corn	Soybeans	Grains	4%
Bean Oil	Soybeans	Grains	4%
Soybeans	Soybean Meal	Grains	4%
Bean Oil	Soybean Meal	Grains	4%
Sugar	White Sugar	Softs	5%
Cocoa	London Cocoa	Softs	5%
Lean Hogs	Live Cattle	Livestock	2.5%
Lean Hogs	Feeder Cattle	Livestock	2.5%

The **Rebalance Date**  $R(T)^j$  is specified as follows:

<b>Strategy Business Day (BD): <math>T</math></b>	<b>Rebalance Date: <math>R(T)^j</math></b>
<b>First BD following a Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Most recent Weight Assignment Calculation Day prior to the immediately preceding Weight Assignment Calculation Day
<b>Second BD up to the next Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Immediately preceding Weight Assignment Calculation Day

## Strategy Specification

**Strategy Name:** RBCSPVRU Index – Week 2

**First Calculation Day of the Strategy:** 02/28/2007

**Base Level of the Strategy:** 100

**Turnover Cost:** 0

**Weight Assignment Calculation Day:** Last Strategy Business Day of the week, every four weeks starting from 02/23/2007, unless otherwise specified

### Information on Pairs and Weights

Pair - Long	Pair - Short	Sector	Weight
Silver	Gold	Precious Metals	5%
Platinum	Gold	Precious Metals	5%
Copper	Aluminium	Industrial Metals	5%
Nickel	Aluminium	Industrial Metals	5%
Nickel	Lead	Industrial Metals	5%
Lead	Zinc	Industrial Metals	5%
Brent Crude Oil	WTI Crude Oil	Energy	7%
Brent Crude Oil	Heating Oil	Energy	7%
Heating Oil	WTI Crude Oil	Energy	7%
RBOB	WTI Crude Oil	Energy	7%
RBOB	Brent Crude Oil	Energy	7%
Corn	Wheat	Grains	4%
Soybeans	Corn	Grains	4%
Soybeans	Bean Oil	Grains	4%
Soybean Meal	Soybeans	Grains	4%
Soybean Meal	Bean Oil	Grains	4%
White Sugar	Sugar	Softs	5%
London Cocoa	Cocoa	Softs	5%
Live Cattle	Lean Hogs	Livestock	2.5%
Feeder Cattle	Lean Hogs	Livestock	2.5%
Gold	Silver	Precious Metals	5%
Gold	Platinum	Precious Metals	5%
Aluminium	Copper	Industrial Metals	5%
Aluminium	Nickel	Industrial Metals	5%
Lead	Nickel	Industrial Metals	5%
Zinc	Lead	Industrial Metals	5%
WTI Crude Oil	Brent Crude Oil	Energy	7%
Heating Oil	Brent Crude Oil	Energy	7%
WTI Crude Oil	Heating Oil	Energy	7%
WTI Crude Oil	RBOB	Energy	7%
Brent Crude Oil	RBOB	Energy	7%
Wheat	Corn	Grains	4%
Corn	Soybeans	Grains	4%

Bean Oil	Soybeans	Grains	4%
Soybeans	Soybean Meal	Grains	4%
Bean Oil	Soybean Meal	Grains	4%
Sugar	White Sugar	Softs	5%
Cocoa	London Cocoa	Softs	5%
Lean Hogs	Live Cattle	Livestock	2.5%
Lean Hogs	Feeder Cattle	Livestock	2.5%

The **Rebalance Date**  $R(T)^j$  is specified as follows:

<b>Strategy Business Day (BD): <math>T</math></b>	<b>Rebalance Date: <math>R(T)^j</math></b>
<b>First BD following a Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Most recent Weight Assignment Calculation Day prior to the immediately preceding Weight Assignment Calculation Day
<b>Second BD up to the next Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Immediately preceding Weight Assignment Calculation Day



## Strategy Specification

**Strategy Name:** RBCSPVRU Index – Week 3

**First Calculation Day of the Strategy:** 02/28/2007

**Base Level of the Strategy:** 100

**Turnover Cost:** 0

**Weight Assignment Calculation Day:** Last Strategy Business Day of the week, every four weeks starting from 02/02/2007, unless otherwise specified

### Information on Pairs and Weights

Pair - Long	Pair - Short	Sector	Weight
Silver	Gold	Precious Metals	5%
Platinum	Gold	Precious Metals	5%
Copper	Aluminium	Industrial Metals	5%
Nickel	Aluminium	Industrial Metals	5%
Nickel	Lead	Industrial Metals	5%
Lead	Zinc	Industrial Metals	5%
Brent Crude Oil	WTI Crude Oil	Energy	7%
Brent Crude Oil	Heating Oil	Energy	7%
Heating Oil	WTI Crude Oil	Energy	7%
RBOB	WTI Crude Oil	Energy	7%
RBOB	Brent Crude Oil	Energy	7%
Corn	Wheat	Grains	4%
Soybeans	Corn	Grains	4%
Soybeans	Bean Oil	Grains	4%
Soybean Meal	Soybeans	Grains	4%
Soybean Meal	Bean Oil	Grains	4%
White Sugar	Sugar	Softs	5%
London Cocoa	Cocoa	Softs	5%
Live Cattle	Lean Hogs	Livestock	2.5%
Feeder Cattle	Lean Hogs	Livestock	2.5%
Gold	Silver	Precious Metals	5%
Gold	Platinum	Precious Metals	5%
Aluminium	Copper	Industrial Metals	5%
Aluminium	Nickel	Industrial Metals	5%
Lead	Nickel	Industrial Metals	5%
Zinc	Lead	Industrial Metals	5%
WTI Crude Oil	Brent Crude Oil	Energy	7%
Heating Oil	Brent Crude Oil	Energy	7%
WTI Crude Oil	Heating Oil	Energy	7%
WTI Crude Oil	RBOB	Energy	7%
Brent Crude Oil	RBOB	Energy	7%
Wheat	Corn	Grains	4%
Corn	Soybeans	Grains	4%

Bean Oil	Soybeans	Grains	4%
Soybeans	Soybean Meal	Grains	4%
Bean Oil	Soybean Meal	Grains	4%
Sugar	White Sugar	Softs	5%
Cocoa	London Cocoa	Softs	5%
Lean Hogs	Live Cattle	Livestock	2.5%
Lean Hogs	Feeder Cattle	Livestock	2.5%

The **Rebalance Date**  $R(T)^j$  is specified as follows:

<b>Strategy Business Day (BD): <math>T</math></b>	<b>Rebalance Date: <math>R(T)^j</math></b>
<b>First BD following a Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Most recent Weight Assignment Calculation Day prior to the immediately preceding Weight Assignment Calculation Day
<b>Second BD up to the next Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Immediately preceding Weight Assignment Calculation Day

## Strategy Specification

**Strategy Name:** RBCSPVRU Index – Week 4

**First Calculation Day of the Strategy:** 02/28/2007

**Base Level of the Strategy:** 100

**Turnover Cost:** 0

**Weight Assignment Calculation Day:** Last Strategy Business Day of the week, every four weeks starting from 02/09/2007, unless otherwise specified

### Information on Pairs and Weights

Pair - Long	Pair - Short	Sector	Weight
Silver	Gold	Precious Metals	5%
Platinum	Gold	Precious Metals	5%
Copper	Aluminium	Industrial Metals	5%
Nickel	Aluminium	Industrial Metals	5%
Nickel	Lead	Industrial Metals	5%
Lead	Zinc	Industrial Metals	5%
Brent Crude Oil	WTI Crude Oil	Energy	7%
Brent Crude Oil	Heating Oil	Energy	7%
Heating Oil	WTI Crude Oil	Energy	7%
RBOB	WTI Crude Oil	Energy	7%
RBOB	Brent Crude Oil	Energy	7%
Corn	Wheat	Grains	4%
Soybeans	Corn	Grains	4%
Soybeans	Bean Oil	Grains	4%
Soybean Meal	Soybeans	Grains	4%
Soybean Meal	Bean Oil	Grains	4%
White Sugar	Sugar	Softs	5%
London Cocoa	Cocoa	Softs	5%
Live Cattle	Lean Hogs	Livestock	2.5%
Feeder Cattle	Lean Hogs	Livestock	2.5%
Gold	Silver	Precious Metals	5%
Gold	Platinum	Precious Metals	5%
Aluminium	Copper	Industrial Metals	5%
Aluminium	Nickel	Industrial Metals	5%
Lead	Nickel	Industrial Metals	5%
Zinc	Lead	Industrial Metals	5%
WTI Crude Oil	Brent Crude Oil	Energy	7%
Heating Oil	Brent Crude Oil	Energy	7%
WTI Crude Oil	Heating Oil	Energy	7%
WTI Crude Oil	RBOB	Energy	7%
Brent Crude Oil	RBOB	Energy	7%
Wheat	Corn	Grains	4%
Corn	Soybeans	Grains	4%

Bean Oil	Soybeans	Grains	4%
Soybeans	Soybean Meal	Grains	4%
Bean Oil	Soybean Meal	Grains	4%
Sugar	White Sugar	Softs	5%
Cocoa	London Cocoa	Softs	5%
Lean Hogs	Live Cattle	Livestock	2.5%
Lean Hogs	Feeder Cattle	Livestock	2.5%

The **Rebalance Date**  $R(T)^j$  is specified as follows:

<b>Strategy Business Day (BD): <math>T</math></b>	<b>Rebalance Date: <math>R(T)^j</math></b>
<b>First BD following a Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Most recent Weight Assignment Calculation Day prior to the immediately preceding Weight Assignment Calculation Day
<b>Second BD up to the next Weight Assignment Calculation Day of the <math>j^{th}</math> Strategy Component</b>	Immediately preceding Weight Assignment Calculation Day

## Strategy Component Specification

### Contract Months

Strategy Component	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gold	G1	J1	J1	M1	M1	Q1	Q1	Z1	Z1	Z1	Z1	G2
Silver	H1	H1	K1	K1	N1	N1	U1	U1	Z1	Z1	Z1	H2
Platinum	J1	J1	J1	N1	N1	N1	V1	V1	V1	F2	F2	F2
Aluminium	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
Copper	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
Nickel	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
Zinc	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
Lead	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
WTI Crude Oil	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
Brent Crude Oil	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2	G2
Heating Oil	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
RBOB	G1	H1	J1	K1	M1	N1	Q1	U1	V1	X1	Z1	F2
Com	H1	H1	K1	K1	N1	N1	U1	U1	Z1	Z1	Z1	H2
Wheat	H1	H1	K1	K1	N1	N1	U1	U1	Z1	Z1	Z1	H2
Soybeans	H1	H1	K1	K1	N1	N1	X1	X1	X1	X1	F2	F2
Bean Oil	H1	H1	K1	K1	N1	N1	Z1	Z1	Z1	Z1	F2	F2
Soybean Meal	H1	H1	K1	K1	N1	N1	Z1	Z1	Z1	Z1	F2	F2
Sugar	H1	H1	K1	K1	N1	N1	V1	V1	V1	H2	H2	H2
White Sugar	H1	K1	K1	Q1	Q1	Q1	V1	V1	Z1	Z1	H2	H2
Cocoa	H1	H1	K1	K1	N1	N1	U1	U1	Z1	Z1	Z1	H2
London Cocoa	H1	H1	K1	K1	N1	N1	U1	U1	Z1	Z1	Z1	H2
Live Cattle	G1	J1	J1	M1	M1	Q1	Q1	V1	V1	Z1	Z1	G2
Lean Hogs	G1	J1	J1	M1	M1	N1	Q1	V1	V1	Z1	Z1	G2
Feeder Cattle	H1	H1	J1	K1	Q1	Q1	Q1	U1	V1	X1	F2	F2

### Hedge Roll Weight Schedule

	Business Day Count					
	4	5	6	7	8	9
Any Strategy Future	1	4/5	3/5	2/5	1/5	0

### FX Rate, First Calculation Day, and Base Level of the Strategy Components

Strategy Component	FX Rate	First Calculation Day	Strategy Base Level
Gold	N/A	01/02/2001	100
Silver	N/A	01/02/2001	100
Platinum	N/A	01/02/2001	100
Aluminium	N/A	01/02/2001	100
Copper	N/A	01/02/2001	100
Nickel	N/A	01/02/2001	100
Zinc	N/A	01/02/2001	100
Lead	N/A	01/02/2001	100

WTI Crude Oil	N/A	01/02/2001	100
Brent Crude Oil	N/A	01/02/2001	100
Heating Oil	N/A	01/02/2001	100
RBOB <sup>2</sup>	N/A	01/02/2001	100
Com	N/A	01/02/2001	100
Wheat	N/A	01/02/2001	100
Soybeans	N/A	01/02/2001	100
Bean Oil	N/A	01/02/2001	100
Soybean Meal	N/A	01/02/2001	100
Sugar	N/A	01/02/2001	100
White Sugar	N/A	01/02/2001	100
Cocoa	N/A	01/02/2001	100
London Cocoa	GBPUSD	01/02/2001	100
Live Cattle	N/A	01/02/2001	100
Lean Hogs	N/A	01/02/2001	100
Feeder Cattle	N/A	01/02/2001	100

<sup>2</sup> RBOB references the New York Harbor unleaded gasoline contracts and rolls into the current RBOB contracts during the regular December 2005 roll.