



Funds-Axis

UCITS- Core (all jurisdictions)

Rule UCITS09 Review and Testing

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## Testing Approach

1. Activate Dummy Sandbox Schemes in FundWare for testing purposes; SB0 – SB7
2. Upload test data to these schemes
3. Funds-Axis to apply UCITS regulatory rules to these test schemes;
  - a. Generate a minimum of 1 breach and 1 pass result per UCITS rule
  - b. To validate a minimum of 1 breach and 1 pass result per UCITS rule
4. Funds Axis will provide documentation providing explanation of regulatory rule results

## UCITS09: OTC Derivatives must be Capable of Reliable valuation

### Rule Setup Details

Rule Summary		
<b>Rule Category</b>	Rule Category	UCITS – CORE (ALL Jurisdictions)
<b>Rule Sub-Category</b>	Rule Sub-Category	1. Eligible Assets
<b>Asset Selection</b>	Asset Category	All Assets
<b>Asset Selection</b>	Asset Type Group	Spot FX Share Class Hedges Derivatives – Other Derivatives Forward FX
<b>Asset Selection</b>	Asset Type	N/A

Rule Custom Attributes		
<b>RCA. Conditions</b>	Is OTC	Yes
<b>RCA. Conditions</b>	Derivative has reliable valuation	No

Rule Conditions		
<b>Rule Conditions</b>	Holding Level	All Holdings
<b>Rule Conditions</b>	Rule Level	In Scheme
<b>Rule Conditions</b>	Aggregator (Base Value in FW Rules Wizard)	Market Value*
<b>Rule Conditions</b>	Breach Condition	> 0
<b>Rule Conditions</b>	Pass Condition	<= 0
<b>Rule Conditions</b>	Denominator	No. of Securities in Scheme
<b>Where Conditions</b>	Pass Condition	N/A
<b>Where Conditions</b>	Breach Condition	N/A
<b>Where Conditions</b>	Denominator	N/A

*\*The selection of denominator of “No. of Securities in Scheme” has the impact of causing the aggregator to be a “Count” of the instruments in the scheme, notwithstanding that the “Market Value” is in fact selected in the rules wizard.*

UCITS09: Rule Results

**Results:**

7 of 8 sandbox schemes are passing UCITS09

**Cause:**

This rule considers the eligibility of OTC derivatives, and if they are capable of a reliable valuation. The maximum amount allowable in OTC derivative which are not considered as being reliably priced is 10% in aggregate. If this threshold is breached, UCITS09 will fail.

The rule is using the RCA “Derivative has reliable valuation” = “No”

This RCA is set up only to classify those derivatives where “derivative has reliable valuation”= “No”, not those where it is yes. This RCA is set-up to be “No” for certain derivative assets types and unless they have been manually overridden as “Derivative has reliable valuation” = Yes; they will be classified as not reliable. The RCA set-up is fully documented and needs to be fully tested.

Testing

Example 1: Breach Result

**Test Example 1:** Scheme: SB2 – Sandbox CDS Fund

**Rule Result:** Failed

**Test Result:** Success

**FundWare Investment Compliance Result:**

**SB2 - Sandbox CDS Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 34,087,657.79

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
10047-c ↑	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Failed	1	4,0000
	9F9ASRU00 - CDS CS_GP_FIN 1.000000% 20-JUN-2022			1 Securities
	9F9ASWU01 - CDS CSGAG 1.000000% 20-JUN-2022			1 Securities
	9FX479U01 - CDS CSGAG 1.000000% 20-JUN-2022			1 Securities
	9FX485U00 - CDS CS_GP_FIN 1.000000% 20-JUN-2022			1 Securities

**FundWare Holding Export Report:**

The Rule Result shown above matches the below extract taken from FundWare:

The below derivatives have applicable UCITS Asset Types for the purpose of UCITS09 and are marked as not being capable of having a reliable valuation; therefore they are meeting all breach criteria.

Instrument Security Code	Asset Type Group Name	Underlying Asset Type	UnderLying Equity (security name)	RCA.Is OTC	RCA.Derivative has reliable Valuation	Derivative Exchange Name
9FX485U00	Derivatives - Other	Euro Non-Dollar	CRED SUISSE GP FIN (GRN)529/07/2019	Yes	No	OTC
9FX479U01	Derivatives - Other	Euro Non-Dollar	CRED SUISSE GP FIN (US)710/05/2020	Yes	No	OTC
9F9ASWU01	Derivatives - Other	Euro Non-Dollar	CRED SUISSE GP FIN (US)710/05/2020	Yes	No	OTC
9F9ASRU00	Derivatives - Other	Euro Non-Dollar	CRED SUISSE GP FIN (GRN)529/07/2019	Yes	No	OTC
17409609G8JD2U	Derivatives - Other	U.S. TREASURY BILLS	US 10YR NOTE (CBT)Jun18	(blank)	No	Chicago Mercantile Exchange

Note: The 'US 10YR Note..' is also marked as having an unreliable valuation but is not breaching for rule UCITS09 due to it being traded on an exchange.

### **High Level Holdings Overview:**

The fund is made up of:

Asset Type Group Name	RCA.Is OTC	RCA.Derivative has reliable Valuation	% Of Assets
Cash			19.7068
Deposits			0.6501
Derivatives - Forward FX	Yes	(blank)	-0.8199
Derivatives - Other	Yes	No	-0.005
Derivatives - Other	Yes	(blank)	10.2999
Derivatives - Other	(blank)	No	-0.0015
Derivatives - Other	(blank)	(blank)	0.0288
Derivatives - Standard Contracts			0.2825
Fixed Income			13.7535
Fixed Income			59.1613
Payables Receivables			-0.2522
<b>Grand Total</b>			<b>102.8043</b>

Example 2: Pass Result

**Test Example 2:** Scheme: SB1 – Sandbox Equity Long Short Fund

**Rule Result:** Pass

**Test Result:** Success

**FundWare Investment Compliance Result:**

**SB1 - Sandbox Equity Long Short Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 207,842,337.06

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
☐	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

**FundWare Holding Export Report:**

The Rule Result shown above does not show any assets as the fund does not contain any assets that would cause the rule to breach.

The snapshot below shows the setup of derivatives in this fund. As shown none of the derivatives have been classified as not having a reliable valuation. The below derivative setup is consistent throughout the fund.

Instrument Security Code	Asset Type Group Name	Underlying Asset Type	Underlying Equity	RCA.Is OTC	RCA.Derivative has reliable Valuation	Derivative Exchange Name
JP393295000C	Derivatives - Other	Common Stock	KATITAS CO LTD	Yes	(blank)	OTC
JP391066000C	Derivatives - Other	Common Stock	TOKIO MARINE HOLDINGS INC	Yes	(blank)	OTC
JP390290000C	Derivatives - Other	Common Stock	MITSUBISHI UFJ FINANCIAL GRO	Yes	(blank)	OTC
JP389035000C	Derivatives - Other	Common Stock	SUMITOMO MITSUI FINANCIAL GR	Yes	(blank)	OTC
JP387000000C	Derivatives - Other	Common Stock	MABUCHI MOTOR CO LTD	Yes	(blank)	OTC
JP385590000C	Derivatives - Other	Common Stock	POLA ORBIS HOLDINGS INC	Yes	(blank)	OTC
JP383080000C	Derivatives - Other	Common Stock	BRIDGESTONE CORP	Yes	(blank)	OTC
JP381480000C	Derivatives - Other	Common Stock	SUBARU CORP	Yes	(blank)	OTC
JP378342000C	Derivatives - Other	Common Stock	HIKARI TSUSHIN INC	Yes	(blank)	OTC
JP378010000C	Derivatives - Other	Common Stock	PARK24 CO LTD	Yes	(blank)	OTC
JP376240000C	Derivatives - Other	Common Stock	NOMURA CO LTD	Yes	(blank)	OTC
JP376045000C	Derivatives - Other	Common Stock	NOEVIR HOLDING CO	Yes	(blank)	OTC
JP373540000C	Derivatives - Other	Common Stock	NIPPON TELEGRAPH & TELEPHONE	Yes	(blank)	OTC
JP372800000C	Derivatives - Other	Common Stock	NIPPON PARKING DEVELOPMENT C	Yes	(blank)	OTC
JP372680000C	Derivatives - Other	Common Stock	JAPAN TOBACCO INC	Yes	(blank)	OTC
JP371120000C	Derivatives - Other	Common Stock	AOZORA BANK LTD	Yes	(blank)	OTC
JP367240000C	Derivatives - Other	Common Stock	NISSAN MOTOR CO LTD	Yes	(blank)	OTC

**High Level Holdings Overview:**

The fund is made up of:

Asset Type Group Name	RCA.Is OTC	RCA.Derivative has reliable Valuation	% Of Assets
Cash	Yes	(blank)	1.0273

Commodities	Yes	(blank)	0.4811
Derivatives - Other	Yes	(blank)	5.1756
Equities	(blank)	(blank)	71.78
Funds	(blank)	(blank)	6.8045
Physical Property	Yes	(blank)	14.7314
<b>Grand Total</b>			<b>99.9999</b>



UCITS09: Overview of Rule Results

**SB0 - Sandbox Equity Mutli Income Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 82,368,872.99

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

**SB1 - Sandbox Equity Long Short Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 207,842,337.06

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

**SB2 - Sandbox CDS Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 34,087,657.79

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Failed	1	4.0000
	9F9ASRU00 - CDS CS_GP_FIN 1.000000% 20-JUN-2022			1 Securities
	9F9ASWU01 - CDS CSGAG 1.000000% 20-JUN-2022			1 Securities
	9FX479U01 - CDS CSGAG 1.000000% 20-JUN-2022			1 Securities
	9FX485U00 - CDS CS_GP_FIN 1.000000% 20-JUN-2022			1 Securities

**SB3 - Sandbox Fund of Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 74,086,960.18

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

**SB4 - Sandbox Futures and Options fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 22,216,808.24

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

**SB5 - Sandbox MMI Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 11,137,506,461.12

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

**SB6 - Sandbox Fixed Income Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 232,189,721.95

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

**SB7 - Sandbox Feeder Fund**

Date: 01 June 2018

Valuation Date: -

Scheme NAV in Base Currency: 140,560,227.95

[Click on rule to view rule details](#)

Breach ID	Rule	Status	Breach Days	Exposure
	UCITS - Core (All Jurisdictions) : 1. Eligible Assets			
+	UCITS09: OTC Derivatives must be Capable of Reliable Valuation	Passed		0.0000

## Appendix A: Rule Construction in FundWare

### UCITS09 OTC Derivatives must be Capable of Reliable Valuation

<b>Rule Name *</b> (Max 100 Chars)	UCITS09: OTC Derivatives must be Capable of Reliable Valua	<b>Rule Category</b>	UCITS - Core (All Jurisdictions)
<b>Rule Reference No *</b> (Max 50 Chars)	UCITS09	<b>Rule Type *</b>	1. Eligible Assets
<b>Rule Short Name *</b> (Max 100 Chars)	UCITS09: OTC Derivatives must be Capable of Reliable Valua	<b>Rule Action Type *</b>	Others
<b>Rule Commentary *</b> (Max 5000 Chars)	UCITS09: OTC Derivatives must be Capable of Reliable Valuation		
<b>Resolution / Tips *</b> (Max 255 Chars)			
<b>Resource</b> (Max 1000 Chars)			
<b>Rule Validation Level *</b>	<input type="radio"/> Asset Type <input type="radio"/> Company / Issuer <input checked="" type="radio"/> Instrument / Security <input type="radio"/> Counterparty <input type="radio"/> Issuer Group <input type="radio"/> Sector <input type="radio"/> Country <input type="radio"/> Instrument Location <input type="radio"/> UL Issuer <input type="radio"/> UL Issuer Group <input type="radio"/> Currency <input type="radio"/> UL Instrument / Security <input type="radio"/> None <input type="radio"/> Counterparty Group <input type="radio"/> Ultimate Issuer Group		
<b>Asset Category</b>	Derivatives Derivatives with Counterparties Securities Warrants	<input type="button" value="→"/> <input type="button" value="→"/> <input type="button" value="←"/> <input type="button" value="←"/>	All Assets
<b>Asset Type Group</b>	Asset Backed Securities Borrowing Cash Commodities CProxyHolding CProxyHoldingOffset Currency Custody Cash Depository Receipt	<input type="button" value="→"/> <input type="button" value="→"/> <input type="button" value="←"/> <input type="button" value="←"/>	Spot FX Share Class Hedges Derivatives - Other Derivatives - Forward FX
<b>Asset Type</b>	AIFMD Trade Type Derivatives Bond Future BOND OPTIONS - CALL CALL WARRANT/OPTION CALL COVERED WARRANT TRADITIONAL OR OTC OPTION CCP INTEREST RATE SWAP CDS - Index options CONTRACT FOR DIFFERENCE CREDIT DEFAULT SWAP	<input type="button" value="→"/> <input type="button" value="→"/> <input type="button" value="←"/> <input type="button" value="←"/>	
<b>LIST OF RULE CONDITIONS</b> <span style="float: right;">Create New Rule Condition</span>			
<b>RULE CONDITION</b>			<b>ACTIVE</b>
If holding for "All Holdings" in "Scheme" (considering "Market Value") ( Derivative has reliable Valuation includes 'No' AND Is OTC Includes 'Yes') is > 0.0000 of "No. of Securities in Scheme"			<input type="checkbox"/>
<b>THEN Breach.</b>			<input type="checkbox"/>
If holding for "All Holdings" in "Scheme" (considering "Market Value") ( Derivative has reliable Valuation includes 'No' AND Is OTC Includes 'Yes') is <= 0.0000 of "No. of Securities in Scheme"			<input type="checkbox"/>
<b>THEN (Pass).</b>			<input type="checkbox"/>

**END**