Computation of Interest Accruals for Bonds (W5)

PURPOSE

This document explains how accrual is calculated for a bond in connection with accounting.

WHY IS THIS IMPORTANT?

This allows users to verify the formula and methodology used by CS Lucas to compute interest accrual for a bond.

FORMULA

When a bond security is created, system generates a coupon and principal repayment schedule.

The coupon PPM (Part Per Million) is the coupon that you received in monetary amount for a bond of 1,000,000 nominal amount. For example, for a 5 million holdings, the coupon amount is multiplied by 5.

The coupon PPM can also be changed in the Maintain Periodic Structure screen in case of a complex or unusual calculation.

The calculation of the bond accrued interest at different dates is set out as below. These examples are based on 1 million holdings of bond.

Complexity arise because VDate of coupon payment may occur after the End Date of coupon period.

Case 1 – where VDate falls on the End Date

	A	B	C	D = B-A	E		Accrual Date				
							F1 = E1/D1*180	G1 = E1/D1*181	H2 = E2/D2*1	I2 = E2/D2*2	J2 = E2/D2*3
	Start Date	End Date	VDate	Period Days	Coupon PPM		28-Apr-17	29-Apr-17	30-Apr-17	1-May-17	2-May-17
1	31-Oct-16	30-Apr-17	30-Apr-17	181	21,571.23		21,452.05	21,571.23	-	-	-
2	30-Apr-17	31-Oct-17	31-Oct-17	184	21,928.77				119.18	238.36	357.53
							21,452.05	21,571.23	119.18	238.36	357.53

Note: Computation of bond interest accruals is based on Coupon End Date. The start date of the coupon period is always from the last Coupon End Date.

Case 2 – where VDate falls after the End Date

	A	B	C	D = B-A	E		Accrual Date				
									H1 = G1	I1 = G1	
							F1 = E1/D1*180	G1 = E1/D1*181	H2 = E2/D2*1	I2 = E2/D2*2	J2 = E2/D2*3
	Start Date	End Date	VDate	Period Days	Coupon PPM		28-Apr-17	29-Apr-17	30-Apr-17	1-May-17	2-May-17
1	31-Oct-16	30-Apr-17	2-May-17	181	21,571.23		21,452.05	21,571.23	21,571.23	21,571.23	
2	30-Apr-17	31-Oct-17	31-Oct-17	184	21,928.77				119.18	238.36	357.53
							21,452.05	21,571.23	21,690.41	21,809.59	357.53

Note: Computation of bond interest accruals is based on Coupon End Date. The start date of the coupon period is always from the last Coupon End Date.

FREQUENTLY ASKED QUESTIONS

RELATED INFORMATION

[Create and Amend Investment](#)

CHANGE HISTORY

Date	By	Changes
11-May-2017	TS	Created.
15-Jun-2017	TS	Re-written.
28-Nov-2019	Lyra	Updated Screenshots.