Investment in Bond – Average at Market Value

See the previous W5 version guide.

PURPOSE

To show illustration of investment in bond average at market value.

OVERVIEW

TRANSACTION DETAILS

Accounting Base Ccy

SGD

Security Parameters

Currency
Accrual Basis
Issue Date
Maturity Date
Coupon
Frequency

SGD
Act/365
15-Jul-02
15-Jan-04
2.8750%
Quarterly

Coupon Payment Schedule

Type	End Date	VDate	Coupon	Coupon PPM
Issued Principal	15-Jul-02	15-Jul-02	2.875000	0.000000
Periodic Repayment	15-Oct-02	15-Oct-02	2.875000	7,246.575340
Periodic Repayment	15-Jan-03	15-Jan-03	2.875000	7,246.575340
Periodic Repayment	15-Apr-03	15-Apr-03	2.875000	7,089.041100
Periodic Repayment	15-Jul-03	15-Jul-03	2.875000	7,167.808220
Periodic Repayment	15-Oct-03	15-Oct-03	2.875000	7,246.575340
Periodic Repayment	15-Jan-04	15-Jan-04	2.875000	7,246.575340

<u>Transactions</u>

TradeID	Buy/Sell	Quantity	Price (%)	TDate	VDate	Purchase Interest	Proceeds
IVM1001	Buy	1,000,000.00	102.00	3-Feb-03	4-Feb-03	1,575.34	1,021,575.34
IVM1002	Buy	2,000,000.00	97.00	15-Feb-03	16-Feb-03	5,041.10	1,945,041.10
IVM1003	Sell	300,000.00	99.00	17-Apr-03	18-Apr-03	70.89	297,070.89
IVM1004	Sell	1,050,000.00	101.50	24-Apr-03	25-Apr-03	827.05	1,066,577.05

<u>Coupon Received</u>

TradeID	Quantity	VDate	Proceeds
CPN1001	3,000,000.00	15-Apr-03	21,267.12

<u>Market Prices</u>

Date	Valuation Price
28-Feb-03	115%
31-Mar-03	105%
30-Apr-03	99%

SUMMARY OF JOURNALS

ID	Date	Description
J1	3-Feb-03	Trade Date Journals

ID	Date	Description
J2	4-Feb-03	Settlement Date Journals
J3	15-Feb-03	Trade Date Journals
J4	16-Feb-03	Settlement Date Journals
J5	28-Feb-03	Month End Revaluation of Bond Investment position
J6	1-Mar-03	Reversal of Month End Revaluation of Bond Investment position
J7	31-Mar-03	Month End Revaluation of Bond Investment position
J8	1-Apr-03	Reversal of Month End Revaluation of Bond Investment position
J9	15-Apr-03	Coupon Settlement Journals
J10	17-Apr-03	Trade Date Journals
J11	18-Apr-03	Settlement Date Journals
J12	24-Apr-03	Trade Date Journals
J13	25-Apr-03	Settlement Date Journals
J14	30-Apr-03	Month End Revaluation of Bond Investment position

J1 **Trade Date Journals**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1001	3-Feb-03	B	INV: Investment Bond Cost	SGD	1,020,000.00	1.000000	SGD	1,020,000.00	J1a
IVM1001	3-Feb-03	P	INV: Investment Interest Income	SGD	1,575.34	1.000000	SGD	1,575.34	J1b
IVM1001	3-Feb-03	B	INV: Due to Broker	SGD	-1,021,575.34	1.000000	SGD	-1,021,575.34	J1c

Note J1b: **Calculation of Accrued Interest**

Last Coupon Date	15-Jan-03	A
Next Coupon Date	15-Apr-03	B
VDate	4-Feb-03	C

Days to Vdate (exclude 4-Feb)	20	D = C-A
Total Days (exclude 15-Apr)	90	E = B-A
Coupon PPM (Part Per Million)	7,089.041100	F
Quantity	1,000,000.00	G
Accrued Interest	1,575.34	H = F*D/E*G/1000000

J2 **Settlement Date Journals**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1001	4-Feb-03	B	INV: Due to Broker	SGD	1,021,575.34	1.000000	SGD	1,021,575.34	J2a
IVM1001	4-Feb-03	B	Cash at Bank	SGD	-1,021,575.34	1.000000	SGD	-1,021,575.34	J2b

J3 **Trade Date Journals**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1002	15-Feb-03	B	INV: Investment Bond Cost	SGD	1,940,000.00	1.000000	SGD	1,940,000.00	J3a
IVM1002	15-Feb-03	P	INV: Investment Interest Income	SGD	5,041.10	1.000000	SGD	5,041.10	J3b
IVM1002	15-Feb-03	B	INV: Due to Broker	SGD	-1,945,041.10	1.000000	SGD	-1,945,041.10	J3c

Note J3b: **Calculation of Accrued Interest**

Last Coupon Date	15-Jan-03	A
Next Coupon Date	15-Apr-03	B
VDate	16-Feb-03	C
Days to Vdate (exclude 16-Feb)	32	D = C-A
Total Days (exclude 15-Apr)	90	E = B-A

Coupon PPM (Part Per Million)	7,089.041100	F
Quantity	2,000,000.00	G
Accrued Interest	5,041.10	H = F*D/E*G/1000000

J4 **Settlement Date Journals**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1002	16-Feb-03	B	INV: Due to Broker	SGD	1,945,041.10	1.000000	SGD	1,945,041.10	J4a
IVM1002	16-Feb-03	B	Cash at Bank	SGD	-1,945,041.10	1.000000	SGD	-1,945,041.10	J4b

J5 **Month End Revaluation of Bond Investment position**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
Portfolio/Sec	28-Feb-03	B	INV: Investment Interest Receivable	SGD	10,633.56	1.000000	SGD	10,633.56	J5a
Portfolio/Sec	28-Feb-03	P	INV: Investment Interest Income	SGD	-10,633.56	1.000000	SGD	-10,633.56	J5b
Portfolio/Sec	28-Feb-03	B	INV: Investment Bond Cost-Revaluation	SGD	490,000.00	1.000000	SGD	490,000.00	J5c
Portfolio/Sec	28-Feb-03	P	INV: Unrealised MTM-P/L - Price	SGD	-490,000.00	1.000000	SGD	-490,000.00	J5d

Note J5b: **Calculation of Accrued Interest**

Last Coupon Date	15-Jan-03	A
Next Coupon Date	15-Apr-03	B
VDate	28-Feb-03	C
Days to Vdate (include 28-Feb)	45	D = C-A+1
Total Days (exclude 15-Apr)	90	E = B-A
Coupon PPM (Part Per Million)	7,089.041100	F

Quantity	3,000,000.00	G
Accrued Interest	10,633.56	H = F*D/E*G/1000000

Note J5d: Calculation of unrealised Profit/Loss – Price

Calculation of Cost

Trade ID	Quantity	Cost	Total Cost
IVM1001	1,000,000.00	1.020000	1,020,000.00
IVM1002	2,000,000.00	0.970000	1,940,000.00
	3,000,000.00	0.986667	2,960,000.00
	I	K=J/I	J

Calculation of unrealised profit/loss (price impact)

Position (Qty)	Ave Cost	Market Price	Profit/(Loss)
3,000,000.00	0.986667	1.150000	490,000.00
I	K	L	M=(L-K)*I

J6 Reversal of Month End Revaluation of Bond Investment position

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
Portfolio/Sec	1-Mar-03	B	INV: Investment Interest Receivable	SGD	-10,633.56	1.000000	SGD	-10,633.56	J6a
Portfolio/Sec	1-Mar-03	P	INV: Investment Interest Income	SGD	10,633.56	1.000000	SGD	10,633.56	J6b
Portfolio/Sec	1-Mar-03	B	INV: Investment Bond Cost-Revaluation	SGD	-490,000.00	1.000000	SGD	-490,000.00	J6c
Portfolio/Sec	1-Mar-03	P	INV: Unrealised MTM-P/L - Price	SGD	490,000.00	1.000000	SGD	490,000.00	J6d

J7 Month End Revaluation of Bond Investment position

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
Portfolio/Sec	31-Mar-03	B	INV: Investment Interest Receivable	SGD	17,958.90	1.000000	SGD	17,958.90	J7a
Portfolio/Sec	31-Mar-03	P	INV: Investment Interest Income	SGD	-17,958.90	1.000000	SGD	-17,958.90	J7b
Portfolio/Sec	31-Mar-03	B	INV: Investment Bond Cost-Revaluation	SGD	190,000.00	1.000000	SGD	190,000.00	J7c
Portfolio/Sec	31-Mar-03	P	INV: Unrealised MTM-P/L - Price	SGD	-190,000.00	1.000000	SGD	-190,000.00	J7d

Note J7b: Calculation of Accrued Interest

Last Coupon Date	15-Jan-03	A
Next Coupon Date	15-Apr-03	B
VDate	31-Mar-03	C
Days to Vdate (include 31-Mar)	76	D = C-A+1
Total Days (exclude 15-Apr)	90	E = B-A
Coupon PPM (Part Per Million)	7,089.041100	F
Quantity	3,000,000.00	G
Accrued Interest	17,958.90	H = F*D/E*G/1000000

Note J7d: Calculation of unrealised Profit/Loss - Price

Calculation of Cost

Trade ID	Quantity	Cost	Total Cost
IVM1001	1,000,000.00	1.020000	1,020,000.00
IVM1002	2,000,000.00	0.970000	1,940,000.00
	3,000,000.00	0.986667	2,960,000.00
	I	K=J/I	J

Calculation of unrealised profit/loss (price impact)

Position (Qty)	Ave Cost	Market Price	Profit/(Loss)
3,000,000.00	0.986667	1.050000	190,000.00
I	K	L	M=(L-K)*I

J8 **Reversal of Month End Revaluation of Bond Investment position**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
Portfolio/Sec	1-Apr-03	B	INV: Investment Interest Receivable	SGD	-17,958.90	1.000000	SGD	-17,958.90	J8a
Portfolio/Sec	1-Apr-03	P	INV: Investment Interest Income	SGD	17,958.90	1.000000	SGD	17,958.90	J8b
Portfolio/Sec	1-Apr-03	B	INV: Investment Bond Cost-Revaluation	SGD	-190,000.00	1.000000	SGD	-190,000.00	J8c
Portfolio/Sec	1-Apr-03	P	INV: Unrealised MTM-P/L - Price	SGD	190,000.00	1.000000	SGD	190,000.00	J8d

J9 **Coupon Settlement Journals**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
CPN1001	15-Apr-03	P	INV: Investment Interest Income	SGD	-21,267.12	1.000000	SGD	-21,267.12	J9a
CPN1001	15-Apr-03	B	Cash at Bank	SGD	21,267.12	1.000000	SGD	21,267.12	J9b

J10 **Trade Date Journals**

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1003	17-Apr-03	B	INV: Investment Bond Cost	SGD	-296,000.00	1.000000	SGD	-296,000.00	J10a

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1003	17-Apr-03	P	INV: Investment Interest Income	SGD	-70.89	1.000000	SGD	-70.89	J10b
IVM1003	17-Apr-03	P	INV: Trading Income Price Impact	SGD	-1,000.00	1.000000	SGD	-1,000.00	J10c
IVM1003	17-Apr-03	B	INV: Due From Broker	SGD	297,070.89	1.000000	SGD	297,070.89	J10d

Note J10b: Calculation of Accrued Interest

Last Coupon Date	15-Apr-03	A
Next Coupon Date	15-Jul-03	B
VDate	18-Apr-03	C
Days to Vdate (exclude 18-Apr)	3	D = C-A
Total Days (exclude 15-Jul)	91	E = B-A
Coupon PPM (Part Per Million)	7,167.808220	F
Quantity	300,000.00	G
Accrued Interest	70.89	H = F*D/E*G/1000000

Note J10a: Calculation of Cost

Trade ID	Quantity	Cost	Total Cost
IVM1001	1,000,000.00	1.020000	1,020,000.00
IVM1002	2,000,000.00	0.970000	1,940,000.00
	3,000,000.00	0.986667	2,960,000.00
	I	K=J/I	J

Trade ID	Quantity	Ave Cost	Total Cost
IVM1003	-300,000.00	0.986667	-296,000.00

	L	K	M=L*K

Note J10c: Calculation of Trading Income Price Impact

Quantity	Ave Cost	Selling Price	Profit/(Loss)
300,000.00	0.986667	0.990000	1,000.00
I	K	N	O = (N-K)*I

J11 Settlement Date Journals

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1003	18-Apr-03	B	INV: Due From Broker	SGD	-297,070.89	1.000000	SGD	-297,070.89	J11a
IVM1003	18-Apr-03	B	Cash at Bank	SGD	297,070.89	1.000000	SGD	297,070.89	J11b

J12 Trade Date Journals

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1004	24-Apr-03	B	INV: Investment Bond Cost	SGD	-1,036,000.00	1.000000	SGD	-1,036,000.00	J12a
IVM1004	24-Apr-03	P	INV: Investment Interest Income	SGD	-827.05	1.000000	SGD	-827.05	J12b
IVM1004	24-Apr-03	P	INV: Trading Income Price Impact	SGD	-29,750.00	1.000000	SGD	-29,750.00	J12c
IVM1004	24-Apr-03	B	INV: Due From Broker	SGD	1,066,577.05	1.000000	SGD	1,066,577.05	J12d

Note J12b: Calculation of Accrued Interest

Last Coupon Date	15-Apr-03	A
Next Coupon Date	15-Jul-03	B
VDate	25-Apr-03	C
Days to Vdate (exclude 25-Apr)	10	D = C-A
Total Days (exclude 15-Jul)	91	E = B-A
Coupon PPM (Part Per Million)	7,167.808220	F
Quantity	1,050,000.00	G
Accrued Interest	827.50	H = F*D/E*G/1000000

Note J12a: **Calculation of Cost**

Trade ID	Quantity	Cost	Total Cost
IVM1001	1,000,000.00	1.020000	1,020,000.00
IVM1002	2,000,000.00	0.970000	1,940,000.00
	3,000,000.00	0.986667	2,960,000.00
	I	K=J/I	J

Trade ID	Quantity	Ave Cost	Total Cost
IVM1004	-1,050,000.00	0.986667	-1,036,000.00
	L	K	M=L*K

Note J12c: **Calculation of Trading Income Price Impact**

Quantity	Ave Cost	Selling Price	Profit/(Loss)
1,050,000.00	0.986667	1.015000	29,750.00
I	K	N	O = (N-K)*I

J13 **Settlement Date Journals**

TradeID	**PostDate**	**B/P**	**Account**	**Ccy**	**Ccy Amt D/(CR)**	**Rate**	**Base**	**Base Amt D/(CR)**	**Line**
IVM1004	25-Apr-03	B	INV: Due From Broker	SGD	-1,066,577.05	1.000000	SGD	-1,066,577.05	J13a

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
IVM1004	25-Apr-03	B	Cash at Bank	SGD	1,066,577.05	1.000000	SGD	1,066,577.05	J13b

J14 Month End Revaluation of Bond Investment position

TradeID	PostDate	B/P	Account	Ccy	Ccy Amt D/(CR)	Rate	Base	Base Amt D/(CR)	Line
Portfolio/Sec	30-Apr-03	B	INV: Investment Interest Receivable	SGD	2,079.45	1.000000	SGD	2,079.45	J14a
Portfolio/Sec	30-Apr-03	P	INV: Investment Interest Income	SGD	-2,079.45	1.000000	SGD	-2,079.45	J14b
Portfolio/Sec	30-Apr-03	B	INV: Investment Bond Cost-Revaluation	SGD	5,500.00	1.000000	SGD	5,500.00	J14c
Portfolio/Sec	30-Apr-03	P	INV: Unrealised MTM-P/L - Price	SGD	-5,500.00	1.000000	SGD	-5,500.00	J14d

Note J14b: Calculation of Accrued Interest

Last Coupon Date	15-Apr-03	A
Next Coupon Date	15-Jul-03	B
VDate	30-Apr-03	C
Days to Vdate (include 30-Apr)	16	D = C-A+1
Total Days (exclude 15-Jul)	91	E = B-A
Coupon PPM (Part Per Million)	7,167.808220	F
Quantity	1,650,000.00	G
Accrued Interest	2,079.45	H = F*D/E*G/1000000

Note J14d: Calculation of unrealised Profit/Loss - Price

Calculation of Cost

Trade ID	Quantity	Cost	Total Cost

IVM1001	1,000,000.00	1.020000	1,020,000.00
IVM1002	2,000,000.00	0.970000	1,940,000.00
	3,000,000.00	0.986667	2,960,000.00
	I	K=J/I	J

Calculation of unrealised profit/loss (price impact)

Position (Qty)	Ave Cost	Market Price	Profit/(Loss)
1,650,000.00	0.986667	0.990000	5,500.00
I	K	L	M=(L-K)*I

EXCHANGE RATES

The following rates were used for this illustration.

Spot Rate

SGD	1.000000

FREQUENTLY ASKED QUESTIONS

FAQ01. When we buy a bond, why does the system journals the purchase interest to the interest income instead of interest receivable?

When purchasing a new bond normal journals would be:

Dr Bond
Dr Bond Premium
Dr Interest Receivable
Cr Bank

CS Lucas solution instead posted the follows:

Dr Bond
Dr Bond Premium
Dr Investment Interest Income
Cr Bank

The CS Lucas solution bond purchase journals complement the manner that subsequent month end journal of interest accruals will be book.

Month end interest accruals booked by CS Lucas system is not incremental from the date of purchase. Instead, it is from the last coupon date to the month end.

Month end interest in the CS Lucas solution are fully reversed at the beginning of the following month.

At the next month end, again the full accrual is made to that month end. The change in the accrual between the months is the net charge to the Income Statement.

Below is an illustration of what happens in a case of the bond purchase.

			Dr / (Cr)
		P/L Int Income	B/S Int Receivable
Last Coupon Date	13-Mar-12		
Daily Interest (say)	$10		
Purchase Interest (Vdate)	15-Apr-12		
Days	33		
Purchase Interest	$330	$330	
Month End			
Days (inclusive)	30-Apr-12		
Days	49		
Accruals	$490	($490)	$490
		($160)	$490
		Note 1	Note 2

Note 1: This 16 days interest from 15-Apr to 30-Apr (inclusive) at $10 per day. The period for which the bond is held. Total $160.

Note 2: This 49 days interest from 13-Mar to 30-Apr (inclusive) at

$10 per day. This is the total amount that is accrued as receivable to the holder. Total $490.

FAQ02. How does unsettled bond transaction affect the computation of interest accrual for accounting?

The example below shows how the interest accrual is computed.

Bond Coupon Schedule

Maintain Periodic Structure

Back | Save | File/Note

Shortname: SIASP 3.22 7/20

Type	End Date	VDate	Coupon	Coupon PPM
Issued Principal	9 Jul 2010	9 Jul 2010	3.220000	0.000000
Periodic Repayment	9 Jan 2011	9 Jan 2011	3.220000	16,232.328770
Periodic Repayment	9 Jul 2011	9 Jul 2011	3.220000	15,967.671230
Periodic Repayment	9 Jan 2012	9 Jan 2012	3.220000	16,232.328770
Periodic Repayment	9 Jul 2012	9 Jul 2012	3.220000	16,055.890410
Periodic Repayment	9 Jan 2013	9 Jan 2013	3.220000	16,232.328770
Periodic Repayment	9 Jul 2013	9 Jul 2013	3.220000	15,967.671230
Periodic Repayment	9 Jan 2014	9 Jan 2014	3.220000	16,232.328770
Periodic Repayment	9 Jul 2014	9 Jul 2014	3.220000	15,967.671230
Periodic Repayment	9 Jan 2015	9 Jan 2015	3.220000	16,232.328770
Periodic Repayment	9 Jul 2015	9 Jul 2015	3.220000	15,967.671230
Periodic Repayment	9 Jan 2016	9 Jan 2016	3.220000	16,232.328770
Periodic Repayment	9 Jul 2016	9 Jul 2016	3.220000	16,055.890410
Periodic Repayment	9 Jan 2017	9 Jan 2017	3.220000	16,232.328770
Periodic Repayment	9 Jul 2017	9 Jul 2017	3.220000	15,967.671230
Periodic Repayment	9 Jan 2018	9 Jan 2018	3.220000	16,232.328770
Periodic Repayment	9 Jul 2018	9 Jul 2018	3.220000	15,967.671230
Periodic Repayment	9 Jan 2019	9 Jan 2019	3.220000	16,232.328770
Periodic Repayment	9 Jul 2019	9 Jul 2019	3.220000	15,967.671230
Periodic Repayment	9 Jan 2020	9 Jan 2020	3.220000	16,232.328770
Periodic Repayment	9 Jul 2020	9 Jul 2020	3.220000	16,055.890410

1-21 of 21 records « ‹ 1 › » 50

This bond has several positions as below.

Trade ID	Ticker	TDate	VDate	B/S	Quantity	Price	Purchase Interest	Net Proceeds
IVM1001	SIASP 3.22	8-May-18	11-May-18	Buy	3,000,000	101.55%	32,288.22	3,078,788.22

IVM1002	SIASP 3.22	11-May-18	16-May-18	Buy	1,500,000	101.55%	16,805.75	1,540,055.75
IVM1003	SIASP 3.22	17-May-18	22-May-18	Buy	1,000,000	101.45%	11,733.15	1,026,233.15
IVM1004	SIASP 3.22	31-May-18	5-Jun-18	Buy	2,000,000	101.53%	25,936.44	2,056,536.44

Computation of interest accrual as at 31 May 2018

Settled Position*

Quantity		5,500,000.00	A
Last Coupon Date		9-Jan-18	B
Next Coupon Date		9-Jul-18	C
As At Date		31-May-18	D
Total Days		181	E = C-B
Days to As At Date		143	F = D-B+1
Coupon PPM		15,967.67123	G
Accrued Interest		69,384.38	H = G/E*F*A/1000000

Unsettled Position*

Quantity	2,000,000.00	
Purchase Interest	25,936.44	I
Total Accrued Interest	95,320.82	J = H+I

*Settled position is all investment trades where VDate is before and on reporting as at date.

RELATED INFORMATION

CHANGE HISTORY

Date	By	Changes
12-Mar-2012	CS	Creation.
21-Jun-2016	RJ	Rewritten. Reformatted.

Date	By	Changes
23-Aug-2018	TS	Added FAQ02.
08-May-2020	LT	Re-formatting.
27-Feb-2025	LT	Updated to W6 instructions and screenshots.