American College of Investment Counsel

Continuing Legal Education

Calculating Swap Breakage Amounts via the Model Form Methodology

June 7, 2017

USD Balance Sheet Investors Acquiring Non-USD Denominated Notes

Background:

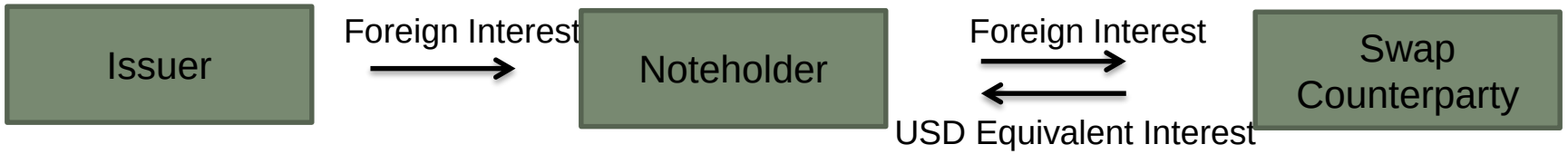
- Issuer – desires to issue foreign notes to the US investor market
- Noteholder – a USD balance sheet investor
- Swapped Note – foreign (non-USD) denominated notes
- Swap Agreement – a cash flow hedge with a Swap Counterparty that will place the Noteholder in a position equivalent to that of an original purchase of USD note

The "Cash Flow Hedge"

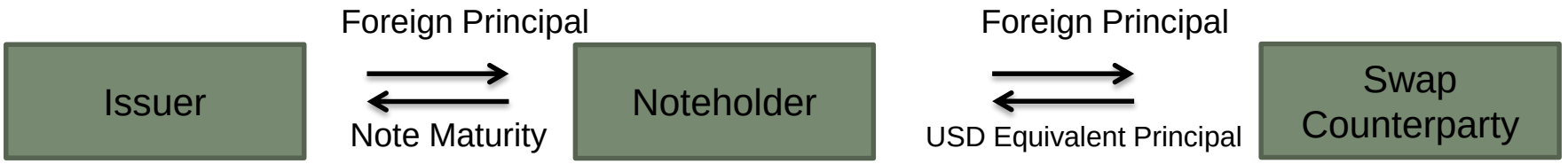
Initial Exchange (Purchase Price at Closing)

The "Cash Flow Hedge"

Ongoing Interest Payments



Principal Repayment at Maturity



Make-Whole

Make-Whole Amount and Modified Make-Whole Amount with respect to Swapped Notes:

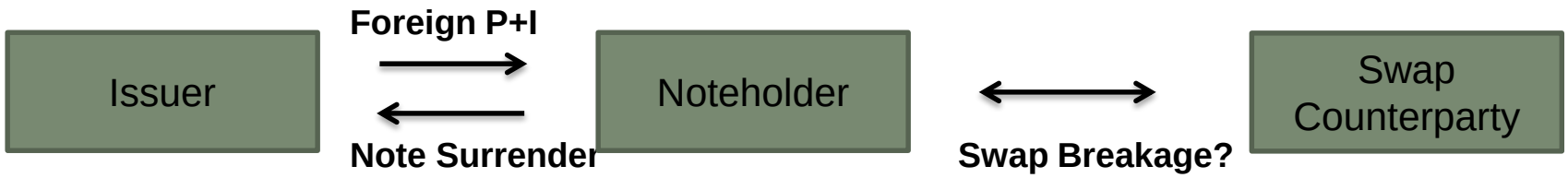
The terms “Make-Whole Amount” and “Modified Make-Whole Amount” mean, with respect to any Swapped Note, an amount equal to the excess, if any, of the **Swapped Note Discounted Value** with respect to the **Swapped Note Called Notional Amount** related to such Swapped Note over such Swapped Note Called Notional Amount, provided that neither the Make-Whole Amount nor the Modified Make-Whole Amount may in any event be less than zero.

Swap Breakage Concepts

- If the Notes remain outstanding until scheduled maturity, the provisions of the ACIC Model Language will not be employed.
- Upon an early payment of the Notes, the Noteholder will need to terminate its Cash Flow Hedge, resulting in the Noteholder and the Swap Counterparty exchanging a swap breakage payment.
- The purpose of the ACIC Model Language is to keep the Noteholder in a USD- equivalent investment position in the event of unscheduled prepayments.

Swap Breakage Concepts

Early Prepayment (treated as a Non-Swapped Note)



Swap Breakage Concepts

MODEL LANGUAGE CONCEPT:

Take into account all amounts received by the Noteholder: Foreign Principal and Interest, Swap Breakage

compare to:

The USD equivalent (as of closing) of Principal and Interest, which happens to be reflected in the USD side of the cash flow hedge

Swap Breakage Indemnity Language

1. Net Loss/Net Gain

If any Swapped Note is prepaid:

(a) any resulting Net Loss shall be reimbursed to the holder of such Swapped Note by the Issuer and

(b) any resulting Net Gain shall be deducted from other amounts otherwise owed by the Issuer

Swap Breakage Concepts

Net Loss means the amount, if any, by which:

(A) the Swapped Note Called Notional Amount (with accrued interest)(at the swap exchange rate)(**exceeds** (B) the sum of:

(x) the Swapped Note Called Principal (with accrued interest)(to be converted in USD at current spot rates)

plus (or minus in the case of an amount paid)

(y) the Swap Breakage Amount received (or paid) by the holder

Swap Breakage Concepts

Net Gain means the amount, if any, by which:

(A) the Swapped Note Called Notional Amount (with accrued interest)(at the swap exchange rate) is **exceeded by** (B) the sum of

(x) the Swapped Note Called Principal (with accrued interest)(to be converted in USD at current spot rates)

plus (or minus in the case of an amount paid)

(y) the Swap Breakage Amount received (or paid) by the holder

Swap Breakage Sample Calculations

Note Issuance Date:	June 15, 2010
Note Maturity:	June 15, 2020
EUR Issuance Amt:	EUR 28,000,000
EUR Interest Rate:	5.20% (June 15 and December 15)
Exchange Rate on June 15, 2010:	1.15 EUR = 1.00 USD
USD Equivalent on June 15, 2010:	USD 24,348,000
USD Fixed Rate (on the Swap Confirmation):	4.90%

Swap Breakage Sample Calculations

Assume an early prepayment on March 15, 2018.

Exchange Rate on March 15, 2018: 0.95 EUR = 1.00 USD

USD Swap Breakage (via Market Quotation): (USD 4,111,111)

Swap Breakage Sample Calculations

Swapped Note Called Notional Amount:	USD **24,348,000**
Accrued Int. on Swapped Note Called Notional Amt.	
= 24,348,000 times 4.90% applied for three months	USD **298,263**
Swapped Note Called Notional Amount (+ accrued interest):	USD **24,646,263**
Swapped Note Called Principal:	EUR **28,000,000**
Accrued Int. on Swapped Note Called Principal	
= 28,000,000 times 5.20% applied for three months	EUR **364,000**
Swapped Note Called Principal (+ accrued interest):	EUR **28,364,000**
converted into USD at current spot rate	
EUR 28,364,000 divided by (0.95)	USD **29,856,842**
Swap Breakage Amount (paid by noteholder in this case):	USD **(4,111,111)**

Swap Breakage Sample Calculations

Net Gain is the difference between:

(a) USD **29,856,842** minus USD **4,111,111**; and

(b) USD **24,646,263**

Which is equal to: USD **1,099,468**

Recent Updates

2007 working group omitted the "I" on either side of the equation

MODEL LANGUAGE CONCEPT:

Take into account all amounts received by the Noteholder – Foreign Principal and Accrued Interest and Swap Breakage

compare to:

The USD equivalent (as of closing) of Principal and Accrued Interest, which happens to be reflected in the USD side of the cash flow hedge

Alternate Approach Under Consideration

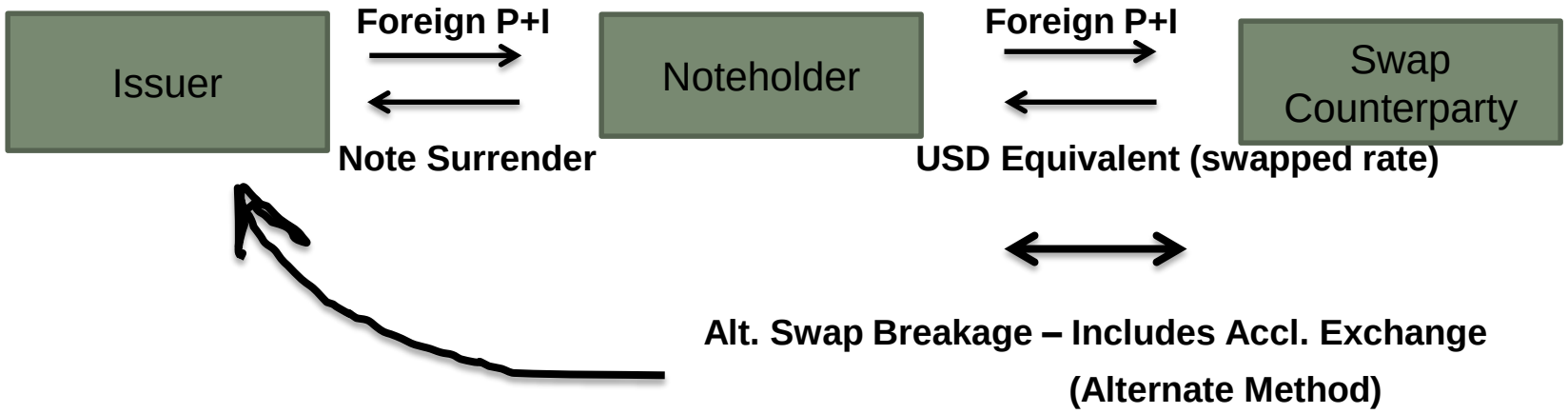
- Remember that when the Noteholder seeks an early termination of the Swap Agreement because of a prepayment of the Note, the Swap Agreement will have a Swap Breakage Amount associated with it. This Swap Breakage Amount is the market price to forgo any future payments or obligations under the Swap Agreement.

- However, the Noteholder and the Swap Counterparty could agree to include as part of the early termination of the Swap Agreement an exchange of final principal (and accrued interest) payments (called an “accelerated exchange of notional”).

Alternate Method to Achieve the Same Economics

The Noteholder will request from the swap counterpart an alternate Swap Breakage quote that includes **“an accelerated exchange and payment of principal amounts and associated accrued and unpaid interest.”**

Cash Flows Upon Early Prepayment: Alternate Method

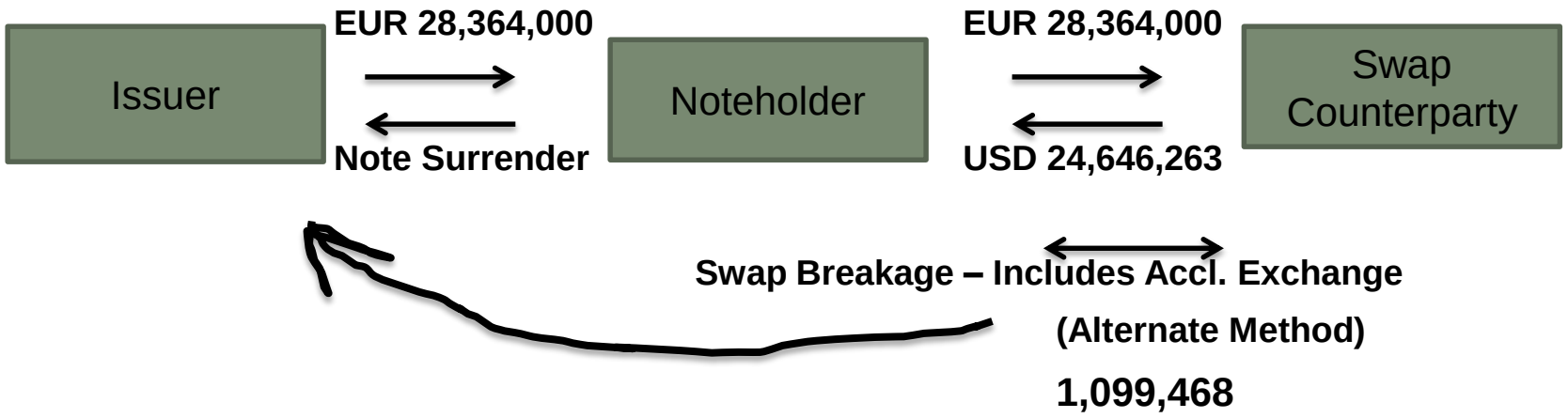


The Alternate Swap Breakage (positive or negative) is returned to or paid by the Issuer; it is algebraically equivalent to the calculation of Net Loss or Net Gain under the traditional method.

Alternate Method to Achieve the Same Economics

Remember from our example above:

Swapped Note Called Notional Amount (+ accrued interest):	USD 24,646,263
Swapped Note Called Principal:	EUR 28,000,000
Swapped Note Called Principal (+ accrued interest):	EUR 28,364,000



The Alternate Swap Breakage (positive or negative) is returned to or paid by the Issuer; it is algebraically equivalent to the calculation of Net Loss or Net Gain under the traditional method.

Advantages to the Alternate Approach

- Fewer FX aggregate conversion costs incurred by the Noteholder, the Swap Counterparty and the Issuer
- Noteholder and the Issuer remove FX variance between time of calculation of payments and time of execution of agreements and delivery of payments
- The combination of simpler execution (fewer prices to reference) and fewer calculations to perform means an easier process during a stressful prepayment scenario