CDO Price Verification Policy & Procedure

January 2008

Version: v1.0
Author(s): Kevin McGovern / Brian Sciacca
Date: Jan 24, 2008

1. Introduction

I. Background

All CDO positions are required by FAS157 to be marked to market at fair value which is defined as the amount at which the position could be exchanged in a current arms-length transaction.

In order to derive the fair value, we rely on our knowledge of the market and other third party data sources and methods to reflect both specific market conditions and the risk inherent in CDO positions.

The purpose of this policy and procedure is to document the existing procedure on the price verification for the CDO book. This policy and procedure will be amended in the future to reflect the changes in the business, product, market, and external regulatory and accounting policies.

II. Scope

This policy and procedure document applies to price verification for CDO positions.

2. Price Verification Policy and Procedure

I. Completeness and Accuracy

The entire CDO PV population should contain all the positions solely or partly owned by the CDO desk. The main source of the CDO population is Gquest.

In the price verification file, we reconcile the Quest Price Testing: Inventory Export file to a Quest extract of the two PL1's (CDO Americas & CDO PROP – HY US) in order to ensure a complete population. Other products are also tested and their populations are reconciled in other ways.

II. Obtain the third party data for price verification

Several independent price verification data sources we are incorporating in the current month-end price verification process:

Derived Prices for verification	Source
Executed trade activities	Laura, GQuest
Position prices	EJV, IDC, ABSG, IDSI, Markit, Bloomberg

Spreads by Collateral Type   JP Morgan

Detailed explanations of these data sources and methodologies:

- Executed trade activities – we refer the latest trade price (up to a month before/ after month-end depending on market volatility)

- Independent spread entered into Intex
    o Based on collateral type and credit rating of CDO – spread such as from JP Morgan research file is input into Intex
    o Several scenarios are ran in Intex at the spread selected – these scenarios include:
        I. CPR – prepayment rate
        II. CDR – default rate
        III. Loss Severity – par minus recovery
    o These criteria used in these scenarios is based upon historical market data as well as current trends

- External Prices
    o External prices are fed through Gquest from EJV, IDC, ABSG, IDSI, and Bloomberg. These prices are reviewed and prices that are more than a month old and incorrect prices are removed.
    o Prices are also downloaded directly from Bloomberg and Markit

- LehmanLive CDO Calculator
    o The LehmanLive CDO Calculator receives feeds from Intex as well as pricing feeds and calculates a NAV for the tranche

III. Hierarchy of the price verification data (methodologies)

Principle: to find a reliable, accurate and independent prices to test CDO position

Price verification combines art and science when incorporating methods for the purpose of verifying CDO positions in the month-end process. Judgment is often used on individual CDO positions. Current procedure takes the preference of these methods in the following order (*it may change in individual cases):

1) Executed trade activities – if the credit market is stable and smooth, we will allow prices from trades that occurred 4-6 weeks prior to the month end; if the credit market is volatile, we use a shorter time period.
2) Hedge Positions – if the position is hedged through either an offsetting position or TRS and both positions have the same mark, the price is considered valid.

3) External Prices – External prices are primarily used to ensure the accuracy of corporate bond positions, equity positions, and treasury positions held by the CDO business. External prices for CDO's and HEL's are less frequently available and less accurate, and are used for pricing very few of these positions.

4) Intex testing – JP Morgan spreads are input into Intex, along with prepayment, default, and recovery assumptions (which can be obtained from other providers) to calculate a dollar price for the position.

5) NAV from LehmanLive Calculator– The LehmanLive CDO Calculator receives both Intex feeds and pricing feeds to determine the NAV of the tranche. The NAV is compared to the price the position is marked at.

6) IO Analysis – This values the trade as being valued exclusively on the present value of future interest payments.

7) Pricing off ABX – ABS CDO's can be priced off ABX Tranches by implying that residential mortgage collateral are valued at the ABX tranche with the same credit rating.

8) Other testing methods

9) Untested – No reliable and accurate price exists for some CDO positions

IV. Valuation adjustment threshold and resolution

- Valuation adjustment threshold

  Variances above $400K for Level 1 & 2 positions, and variances above $300k for Level 3 positions are investigated further.

- Resolution of significant valuation variance

  Materiality, market condition, vender quality, traders' track records, and traders' discussion are used to resolve the variance.

V. Management reporting and escalation

- Management reporting

  Monthly price verification variance reports are prepared and distributed to product control management and the trading desk.

- Significant issue escalation

  If price verification product controller and trader cannot resolve the material variance, the issue is to be escalated to senior finance management (Global Head of Fixed Income Product Control, Global Head of Valuation Control Group, and Head of GCP trading desk). After the escalation, a collective decision will be made and P&L may be adjusted.