



First Level Pricing Challenge November 9, 2010

Code:	<i>TEST0250</i>
Description:	<i>credit default swap sample ...</i>
Pricing date:	<i>11-Jun-2010</i>
Request date:	<i>09-Nov-2010</i>

Welcome to the StatPro Complex-Asset-Pricing automated support service. This document briefly describes how the value of the specified contract was computed. The different sections contain a summary of the pricing evaluation; the terms and conditions of the contract; a short description of the pricing model and the risk factors used; and, finally, a detailed list of market data used in the evaluation. In order to help reproduce the computation there might be included some intermediate computations such as the bootstrapped Hull-White parameters.

1 Evaluation summary

NPV evaluation	22622.22 USD		
Code	<i>TEST0250</i>	Day count	<i>Act/360</i>
Product	<i>credit default swap sample ...</i>	Adjusted?	<i>false</i>
User	<i>sps</i>	Maturity date	<i>28-Feb-2014</i>
Requested date	<i>09-Nov-2010</i>	Settlement days	<i>2</i>
Requested time	<i>17:51</i>	Start date	<i>28-Feb-2007</i>
Pricing date	<i>11-Jun-2010</i>	Rolling convention	<i>Following</i>
Pricing time	<i>14:02</i>	Frequency	<i>2</i>
Customer Name	<i>test_customer</i>	Restructuring	<i>MM</i>
Evaluation id	<i>1</i>	Spread	<i>0.0100</i>
		Seniority	<i>SEN</i>
		Calendar	<i>TARGET</i>
		Notional	<i>1000000</i>
		Issuer code	<i>ABB-</i>

2 Terms and conditions

This section lists the terms and conditions of the given instrument in the Complex-Asset-Pricing database at the time of evaluation.

The holder of the pay side of a credit-default swap is buying insurance on the default of a certain name. Given a certain notional, the insurance premium due is a fixed-rate percentage of the notional. In case of default, the holder of the swap receive side has the obligation to reimburse an obligation issued by the insured name at face value.

3 Model and risk factors

This section contains a brief description of the model used to evaluate the given instrument and the risk factors affecting the instrument value.

Cash-flow discounting and default probability

The present value of the instrument is computed by adding the present value of all the expected received cash flows, and subtracting the present value of all expected paid cash flows. Before discounting, each cash flow is multiplied by the issuer survival probability if the payment is to be made by the is-

suer, and by the issuer default probability if the payment is due when the issuer defaults. Finally, all probability-weighted cash flows are multiplied by the risk-free discount factor at their payment date.

Risk-free piecewise-flat forward yield curve

The risk-free yield curve is obtained by bootstrapping the yield curve from the deposit and swap rates quoted on the underlying contract currency. The curve nodes are chosen to match the maturities of the deposit and swap instruments used in the bootstrap process. Therefore, at the curve nodes the discount factor is determined by the given deposit and swap rates. In between curve nodes, the discount factor is computed assuming a constant continuously-compounded instantaneous forward rate. For maturities longer than that of the longest swap, the discount factor is calculated by assuming an instantaneous forward rate equal to that of the computed node with the longest maturity.

Piecewise-flat-hazard-rate default probability

For each issuer name the default probability is obtained from the quoted spreads of the single-name credit-default swaps on that issuer name. The curve nodes are chosen to match the maturities of the credit-default swaps used in the bootstrap process. At the curve nodes the default probability agrees with that of the quoted credit-default swaps. In between curve nodes, the default probability is computed assuming a constant hazard rate. For maturities longer than that of the longest credit-default swap, the default probability is calculated by assuming a hazard rate equal to that of the computed node with the longest maturity.

4 Market data

This section lists the raw market data, together with some intermediate computed data, used to evaluate the given instrument.

Risk-free interest-rate curve 1

Listed below the available money-market deposit rates and the interest-rate swaps used to bootstrap the risk-free interest-rate curve with id *cap-pff-USD*.

Deposit Rates

Maturity	Rate
1w	0.266 %
1m	0.280 %
2m	0.316 %
3m	0.347 %
6m	0.531 %
12m	1.016 %

Swap Rates

Maturity	Rate
2y	1.167 %
3y	1.721 %
4y	2.213 %
5y	2.629 %
6y	2.946 %
7y	3.202 %
8y	3.403 %
9y	3.563 %
10y	3.685 %
11y	3.796 %
12y	3.889 %
13y	3.967 %
14y	4.037 %
15y	4.089 %
20y	4.234 %
25y	4.299 %
30y	4.332 %

Outstanding issuers

Listed below are the names of the non-defaulted security issuers together with their estimated recovery ratio.

Issuer	Recovery ratio
ABB_000002	0.4

Single-name CDS spreads

This is a list of the quoted credit-default swap spreads for each name and maturity.

Issuer ABB-

Maturity	Value
3m	0.088 %
6m	0.132 %
1y	0.177 %
2y	0.287 %
3y	0.397 %
4y	0.460 %
5y	0.523 %
6y	0.558 %
7y	0.593 %
8y	0.611 %
9y	0.629 %
10y	0.647 %
11y	0.647 %
12y	0.647 %
15y	0.646 %
20y	0.645 %
30y	0.644 %