

Synthetic ABS Nuances

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I. Introduction

The term "synthetic ABS" refers to credit default swaps (CDS) on ABS. Users of synthetic ABS – like users of CDS in general – usually intend for the synthetics to closely replicate the risks and benefits of the underlying reference obligations. However, some degree of mismatch is unavoidable. We have previously addressed certain aspects of typical ABS CDS arrangements that can cause such a mismatch (e.g., the treatment of an available funds cap).¹ This paper addresses additional causes of mismatch that can drive pricing disparities between an ABS CDS and its underlying reference security. In particular, this paper addresses access to information, voting rights, disputes, legal uncertainty, counterparty risk, and liquidity in the context of synthetic ABS.

II. Some Essential Background

A. CDS Basics and Vocabulary

A CDS is a contract between two parties in which one buys credit protection from the other. In some respects, a CDS is similar to a guarantee that covers credit risk. For example, in the case of a CDS on a corporate bond, party X might purchase protection from party Y covering the credit risk of Acme Corporation. X is the **protection buyer** and Y is the **protection seller**. Acme is the **reference entity** under the contract. X agrees to pay Y a periodic fee during the term of the contract unless and until a **credit event** occurs. A credit event could be Acme's bankruptcy or a default on its financial obligations. If a credit event occurs, Y has to pay X the amount specified in the contract and the contract terminates. In some contracts, the amount that Y must pay is determined by the decline in the price of Acme's debt securities following the credit event. Such an arrangement is called **cash settlement** of the contract. In other cases, X delivers an eligible Acme bond to Y, for which Y must pay par. That kind of settlement arrangement is called **physical settlement**. Once settlement occurs, the contract is over.

A CDS has a "**notional amount**," which defines the maximum dollar level of exposure under the contract. A CDS also has a specified term, which defines the time limit of exposure. So, X and Y might enter into a 5-year, \$10 million CDS that references Acme. The notional amount is \$10 million and the term is five years. If a credit event occurs during the 5-year term, Y would have to pay X. In a cash settlement scenario, the payment amount would be \$10 million times the percentage decline in the price of specified Acme bonds. In a physical settlement scenario, X would purchase Acme bonds in the open market (probably at low prices reflecting the company's distressed condition) and deliver them to Y, who would have to pay \$10 million for them.

A typical CDS on an ABS includes an important additional feature. It provides for a potential stream of payments over the life of a security. More specifically, a typical CDS on ABS provides for the protection seller to cover cash flow shortfalls during the entire life of the reference obligation without

¹ Whetten, M., *Synthetic ABS 101: PAUG and ABX.HE*, Nomura fixed income research (7 Mar 2006).

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requiring termination of the contract. This is often called a "pay as you go" or "PAUG" structure. Payments by the protection seller during the life of the contract are called **floating payments**. Under some circumstances, the protection buyer has the option to terminate the contract with physical settlement while the security remains outstanding. In addition, a typical ABS CDS follows the amortization process of its underlying reference obligation. That is, the notional amount of the ABS CDS declines in lockstep with the amortization of the reference obligation.

B. CDS Documentation

Parties to swap contracts usually establish and document their rights and obligations using the forms promulgated by the International Swaps and Derivatives Association (ISDA). The documentation has five main components.

The first is the **ISDA Master Agreement**. The ISDA Master Agreement establishes the broad framework for two companies to enter into swap transactions with each other. The ISDA Master Agreement between two parties governs all the swap transactions between them. There are several versions of the ISDA Master Agreement. The latest one is from 2002 but the 1992 version is more widely used. The ISDA Master Agreement addresses broad issues that pertain to all swap transactions between a pair of companies. For example, the ISDA Master Agreement addresses netting of payments, the treatment of withholding taxes, representations of the parties, covenants, and events of default. In addition, the agreement covers the parties' rights to terminate some or all of the swaps between them. It also covers the calculation of damages or termination payments when defaults or terminations occur.

The second component of documentation is the **Schedule** to the Master Agreement. The Schedule contains provisions that are optional or for which the parties must choose among alternatives. For example, the Schedule is where the two parties to a Master Agreement decide whether cross default provisions or automatic early termination provisions will apply. Part 5 of the Schedule (for both the 1992 and 2002 versions) is where parties add in any kinds of provisions to which they agree.

The third component of documentation for swap transactions between a pair of companies relates to credit support. Credit support provisions are intended to mitigate each party's exposure to the other's credit risk. The most widely used credit support provisions are in the **1994 Credit Support Annex** (the "CSA"), though ISDA more recently released the **2001 ISDA Margin Provisions**. Under the CSA, the party with a positive net exposure to the other is supposed to receive collateral from the other party to cover the amount of the exposure. For each ongoing swap, each party's exposure to the other is determined by market quotations for a transaction that would replicate the economics of the swap.

The fourth component of documentation relates to individual swap transactions between the parties. Each swap transaction has a separate **Confirmation** that documents the terms. A typical confirmation states that:

This Confirmation supplements, forms a part of, and is subject to, the ISDA Master Agreement, dated as of [date], as amended and supplemented from time to time (the "Agreement"), between you and us. All provisions contained in the Agreement govern this Confirmation except as expressly modified below.

A Confirmation specifies the details of a particular swap transaction. ISDA publishes different Confirmations for a wide array of transactions: interest rate swaps, currency swaps, credit default swaps, equity swaps, etc. Confirmations for simple swap transactions, like basic interest rate swaps, can be quite short. Confirmations for complex transactions can be long.

There are several competing forms of Confirmation for ABS CDS. The most widely used form in the U.S. is called the "Dealer Form" or "Form I." ISDA has released several versions of the Dealer Form.

The latest version has two parts² and was released on 10 November 2006. That version replaced an earlier one from 11 April 2006. The April form superseded the previous one, which ISDA had released on 23 January 2006. That version superseded the original form, which ISDA had released on 21 June 2005. We discussed the key provisions of the Dealer Form in our earlier research.³

In addition to the Dealer Form, ISDA publishes various other forms of Confirmations for CDS on ABS. One is called the "End User Form" or "Form II." The monoline bond insurers originally promoted the End User Form because they believed that the Dealer Form was biased in favor of protection buyers. However, as the Dealer Form has evolved, use of the End User Form has diminished.

A third form of Confirmation for CDS on ABS excludes the pay-as-you-go mechanism entirely. It provides for either cash or physical settlement following the occurrence of a credit event (*i.e.*, just like a CDS on a corporate issuer).

The fifth component of documentation for a swap transaction is definitions. ISDA publishes definitions for use in documenting different types of swaps. For ABS CDS, the applicable definitions are the **2003 ISDA Credit Derivative Definitions**. The definitions are incorporated into a transaction through the Dealer Form.

Although the total package of documentation for swap transactions between two parties is voluminous, it is necessary. A swap transaction possesses additional dynamics beyond those related to its underlying subject matter. The ongoing obligations of the parties, their ability to transfer or terminate the transaction, and their remedies against each other in case of default are key issues that require documentation.

III. Differences between Cash ABS and Synthetic ABS

A. Access to Information

Unlike the holder of an actual security, a party to an ABS CDS does not have the right to receive information from the issuer. This is because a party to an ABS CDS does not have a direct legal relationship with the issuer of the underlying reference obligation (unless the party also owns the reference obligation or another tranche from the same deal).

Investors in a typical ABS transaction have an absolute legal right to receive monthly reports on the deal. Issuers often make the monthly reports publicly available – through their web sites or through information vendors like ABSNet – but they have no legal obligation to do so. In fact, for most types of ABS deals, even the requirement to file monthly reports with the SEC is only temporary.⁴

When an issuer or its deals get into trouble, the flow of information often slows or stops. Both holders of the affected securities and other market participants are left in the dark. The difference is that the security holders can apply pressure to the issuer to give them the information.⁵

Although a party to an ABS CDS does not have direct access to information about the underlying reference obligation, it can sometimes bargain with its swap counterparty at the inception of the swap to get such access. This presumes that the counterparty owns the reference obligation or otherwise has obtained rights to the information. This sometimes happens when the holder of an ABS becomes

² The two parts are a 33-page "Standard Terms Supplement" and a 5-page "Form of Confirmation."

³ *Id.* (discussing the January 2006 version of the Dealer Form).

⁴ For example, Options One's OOMLT 2004-3 deal priced in September 2004. In January 2005, just four months later, the issuer submitted forms to suspend its duty to file the monthly reports. As it turned out, the SEC got only two monthly reports for the deal.

⁵ The Pooling & Servicing Agreement for a typical home equity ABS deal provides that the master servicer's failure to perform any of its obligations can be cause for its termination.

the buyer of protection through a CDS on the security or on another tranche from the same deal. In such a case, the protection buyer has access to information and may agree to share the information with the protection seller.⁶

If the parties to a swap include non-standard provisions that address access to information, those provisions would appear in the Confirmation for the trade. Including such provisions can make the swap more attractive to either side. However, the presence of any non-standard provisions has the potential to make the swap less "liquid" (*i.e.*, harder to transfer).

Not having the legal right to information has potentially different effects on the two sides of a swap. The consequences arguably are not troubling from the perspective of a protection seller. Unless the reference obligation (or its issuer) gets into trouble, information should be available through third-party sources. If and when trouble comes, it likely would be accompanied by payment shortfalls that trigger a floating payment event or a credit event. The absence of information at that stage does not really make the situation worse for the protection seller. In fact, the absence of information arguably helps the protection seller by possibly delaying the determination of the correct amount of a floating payment for which it is responsible.

Not having the legal right to information can be tougher on a protection buyer. When a protection buyer cannot get information about a troubled deal, it may not be able to demand a floating payment or to declare a credit event when the underlying facts would entitle it to receive payments.

B. Voting Rights

A party to an ABS CDS does not have voting rights to participate in decisions relating to the underlying reference obligation (unless it also owns the reference obligation). This can put a protection seller in a worse position than a holder of the actual security if there is a default or some other situation in which security holders collectively take action in a deal.

As with access to information, the parties to an ABS CDS sometimes address the issue voting rights in the Confirmation for their swap. For example, this can happen when the protection buyer owns the underlying reference obligation and agrees to let the protection seller exercise its voting rights.

In the context of distressed ABS, voting rights are a component of an investor's total package of rights. By strategically exercising voting rights, investors in distressed ABS attempt to maximize the recovery on the securities. They can do so by pressuring the issuer with the threat to terminate the issuer's servicing rights or to enforce other available remedies. In addition, voting rights can be important with respect to relations among investors in a deal. For example, if an investor possesses the swing vote on a disputed matter, it may be able to obtain concessions from its fellow investors.

Voting rights give an ABS investor some ability to control his destiny; to have a voice in steering the decisions that will determine (or, at least, affect) his recovery in distressed situations. In contrast, a protection seller in an ABS CDS does not have comparable control. His only alternative to simply riding through the storm is to try to liquidate the position (more on this later).

C. Disputes

Parties to a CDS bear the risk that they may disagree about the details of settlements or floating payments. The ISDA Master Agreement and various forms of Confirmations employ the concept of a "Calculation Agent" to try to minimize the number of disputes that arise. In a swap transaction, one of the parties usually serves as the Calculation Agent and is responsible for determining payment amounts. Nonetheless, disputes seem to arise with disturbing frequency. According to some

⁶ The Dealer Form provides that the "Calculation Agent" for the swap will furnish the parties with the servicing reports for the underlying deal, if they are reasonably available (§ 7(a)). The catch, of course, is reasonable availability.

estimates, as much as 40% of CDS that have experienced credit events have become the subject of disputes.⁷

ABS CDS are a young derivative product and there have been few occurrences of credit events or floating payment events. At this early stage of the product's lifecycle, it is impossible to tell whether disputes will be more or less frequent for ABS CDS than they have been for other CDS. However, given uncertainty on this point, parties to ABS CDS should be prepared to absorb some measure of additional expense associated with dispute resolution.

Although the 1992 Credit Support Annex specifies a procedure for disputes about the value of collateral, the ISDA Master Agreement does not provide for specific procedures for dispute resolution. Accordingly, unless parties to a swap have specifically agreed to cost-saving measures, such as arbitration, they must be prepared for full scale litigation in New York or English courts when disputes cannot be resolved amicably through negotiation.

D. Legal Uncertainty

Parties to CDS arguably face somewhat greater uncertainty about their legal rights than do holders of actual bonds. Few reported court cases address CDS and some that do appear to express contradictory holdings. For example, in *Deutsche Bank v. Ambac*, the District Court for the Southern District of New York ruled that the protection seller under a CDS was excused from its obligation to pay following the bankruptcy of the reference entity because the protection buyer had failed to deliver the reference obligation within the timeframes specified in the contract.⁸ The court applied a principle of strict interpretation of the contract. Conversely, in *Aon Financial Products v. Société Générale*, the same District Court seemed to interpret a CDS by looking far beyond the four corners of the documents.⁹ In the *Aon* case, the court ruled that a protection seller was required to make protection payments even though a credit event (arguably) had not occurred and the conditions to settlement had not been satisfied. Many market participants feel that the *Aon* case was wrongly decided. The protection seller in the case is appealing the decision and ISDA has an *amicus curiae* brief in support of the protection seller's position.¹⁰

E. Counterparty Risk

Each party to a CDS bears the risk that the other party will default on its obligations. This risk is somewhat different from the risk that the parties bear relating to the credit performance of the underlying reference entity or reference obligation. A protection buyer bears the risk that the protection seller will fail to make settlement payments following a credit event. This can be a significant risk because settlement payments can be large in relation to the notional amount of a swap. Likewise, a protection buyer on an ABS CDS bears the risk that the protection seller will fail to make required floating payments during the life of the contract. Those payments would be triggered by floating payment events such as shortfalls in interest or principal on principal writedowns on the reference obligation. Conversely, a protection seller bears the risk that the protection buyer fails to make periodic "fixed payments" as specified in the Confirmation for the swap.

Section 5 of the ISDA Master Agreement addresses defaults and remedies. The 1992 version provides several alternative frameworks for determining the amount that an injured party is entitled to recover in cases of default (and in cases of early terminations other than default). The 2002 ISDA Master Agreement is quite different from the 1992 form in its treatment of defaults and remedies. The changes in the 2002 form were a response to perceived shortcomings of the 1992 form, which

⁷ Tavakoli, J., *Commentary: Mon Ami ISDA: Crisis in Credit Derivatives*, Lipper Hedgeworld (22 May 2006).

⁸ *Deutsche Bank v. Ambac Credit Products*, No. 04 Civ. 5594 (DLC) (SDNY 6 Jul 2006).

⁹ *Aon Financial Products v. Société Générale*, 2005 WL 427535 (SDNY 22 Feb 2006) (the case is on appeal the U.S. Court of Appeals for the Second Circuit, No. 06-1080-CV).

¹⁰ <http://www.isda.org/speeches/pdf/ISDA-Amicus-Curiae-Brief05-08-06.pdf>

became apparent following the Asian and Russian debt crises of the late 1990s.¹¹ Despite the significant changes, most pairs of participants in the swaps arena continue to use the 1992 form.¹²

Credit support provisions, such as those embodied in the 1994 Credit Support Annex, are designed to mitigate counterparty credit risk. As noted above, the 1994 CSA provides that the party with a positive net exposure to the other is supposed to receive eligible collateral to cover the full amount of the exposure. At first blush, such a system appears as though it should virtually eliminate counterparty risk. However, gaps remain. First, some pairs of market participants elect to permit a specified level of unsecured net exposure. The documentation implements that approach with the term "threshold." Second, some pairs of parties agree to a "minimum transfer amount," so that small changes in the net exposure do not trigger a requirement for delivery or release of collateral. Third, the size of exposures can change quickly between "valuation dates," especially if the perceived credit quality of a reference obligation is deteriorating. Fourth, after a valuation date there is a further delay of at least one business day before the delivery of new required collateral. Thus, in unfortunate situations, the party with a positive net exposure may not have sufficient collateral to be fully secured when the other party defaults.

The Bankruptcy Code contains some helpful provisions for parties to swaps. The Bankruptcy Code's automatic stay¹³ does not apply to the liquidation, termination, or acceleration of a swap contract (§ 560) or to master netting agreements (§ 561).¹⁴

F. Liquidity

ABS CDS are less liquid than actual ABS. Even when actual ABS are somewhat illiquid, they generally are more liquid than CDS that use them as reference obligations.

Liquidity is a tricky concept. It can be approached from different angles. From one perspective, liquidity can be measured by the spread between the simultaneous bid and ask prices for an asset. From a second perspective, liquidity is observable in the typical amount of time that it takes to effect secondary trades in the asset.

Although simultaneous bid and ask prices are not continuously available for most ABS, differences in the typical time to execute trades are apparent. Triple-A-rated credit card ABS trade in seconds or minutes. Triple-B-rated home equity ABS trade in hours or days. Distressed ABS and those backed by esoteric assets trade "by appointment only," if at all.

However, all trades in actual ABS are simple from a mechanical perspective. Once traders at two firms agree on a price, they confirm the trade by specifying the subject security (usually by CUSIP), the quantity, and the price. In most cases, the trade settles through the DTC book entry system.

Trading an ABS CDS is another matter entirely. A swap contract is not a freely transferable instrument. It cannot simply be "sold" to another market participant. Once a company becomes a party to an ABS CDS, the simplest way to get out of the position is to negotiate with the counterparty. However, the counterparty has no obligation to agree to termination of the contract. If the counterparty won't agree to termination, it may agree to accept a transfer of the first party's rights and obligations to another market participant. Such a transaction is called a "novation" and the 2003 ISDA Credit Derivatives Definitions include forms for novations.

¹¹ For a general discussion of the changes, see International Swaps and Derivatives Association, *Users Guide to the ISDA 2002 Master Agreement*, at 24-30 (2003 edition).

¹² Most users of the 1992 ISDA Master Agreement select the "second method and market quotation" alternative under § 6(e) for determining payments following an event of default.

¹³ The "automatic stay" feature of the U.S. Bankruptcy Codes temporarily prevents creditors from enforcing their rights against a debtor as soon as the debtor files a petition for bankruptcy protection. The key provision is § 362.

¹⁴ See amendments to the Bankruptcy Code in the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, 119 Stat. 23 (2005).

When a counterparty refuses to terminate a contract or to accept a novation, the first party may be able to enter into a mirror-image trade. That is, if the first party is the protection seller on the original CDS, it can become the protection buyer on a second CDS that references the same underlying ABS and that has identical terms. With this approach, the first party hedges away its risk in the reference obligation but not its exposure to the counterparty on the original CDS. In fact the first party takes on new exposure to the counterparty on the second CDS.

So far, the experience of the ABS CDS arena has been that market participants can get into contracts quite readily with dealers as their counterparties. CDOs have been prominent as sellers of protection on CDS that reference residential MBS and home equity ABS. Conversely, hedge funds have been prominent as buyers of protection on the CDS that reference the same types of securities. Most often, the underlying reference obligations carry ratings in the triple-B range and are issued in modest volumes compared to the senior tranches of their related deals. Accordingly, the reference obligations themselves are generally illiquid and only thinly traded in the secondary market.

Participants in the ABS CDS market have less experience, collectively, getting out of trades once they are in them. Anecdotal evidence suggests that getting out is much tougher than getting in, for both sides of the market. It remains to be seen whether ABS CDS can become as liquid as or more liquid than their underlying reference obligations. If that ever can happen, we would not expect to actually observe it for at least one or two years.

IV. More Differences

The preceding section emphasized features of ABS CDS that can make them more complicated or risky than their underlying reference obligations. However, the combined effect of those features is often quite modest.

Other differences favor ABS CDS over actual ABS. Two frequently cited advantages of CDS over actual securities are the ability to take "short" positions (*i.e.*, to buy protection) and the ability to take risk without committing significant principal at the inception of a trade (*i.e.*, selling protection).¹⁵ For a company that funds itself at rates materially above LIBOR, the latter feature is *extremely* attractive.

Likewise, the "fixed cap" feature selected in most ABS CDS slightly favors the protection seller over a holder of the actual reference obligation. The holder of the actual reference obligation would bear the full brunt of interest shortfalls stemming from the "available funds cap" built into the deal's cash flow waterfall. In contrast, under the "fixed cap" election in most ABS CDS, the protection seller's downside is limited to the amount of the premium (fixed payment) that he would have received during the period.

Another difference is the treatment of coupon step-ups. Many home equity ABS provide for a coupon step-up if the servicer does not exercise its clean-up call option when the balance of the underlying loan pool declines to 10% of its original amount. The purpose of the coupon step-up provision is to motivate the servicer to exercise the option (in order not to forfeit excess spread cashflows). Section 5 of the Dealer Form addresses the issue of coupon step-ups. If parties to a CDS elect to use the provisions, a coupon step-up in the reference obligation triggers an equal step-up in the protection buyer's fixed payments to the protection seller. However, the step-up also gives the protection buyer the option to terminate the swap at no cost, even if the credit quality of the underlying security has improved significantly.

Other mechanical provisions of the Dealer Form tend to favor one side or the other compared to investors in the underlying securities. For example, if parties to an ABS CDS elect to use the "distressed ratings downgrade" credit event, the protection seller on the CDS may be disadvantaged

¹⁵ In the latter case, the amount of collateral that a protection seller must deliver to secure its contingent obligation generally is much less than the notional amount of the contract.

relative to a holder of the reference obligation. The protection seller may be forced to make a settlement payment before the investor incurs any loss.¹⁶ Likewise, the Dealer Form's treatment of "implied writedowns" can require a protection seller to make floating payments (or settlement payments) when there has been no payment shortfall on the reference obligation. This seems to disadvantage the protection seller compared to the holder of the underlying security.

V. Conclusion

Summary of ABS CDS Advantages and Disadvantages			
	Cash Investor	CDS	
		Protection Seller	Protection Buyer
CDS Documentation	✓		
Access to Information			✗
Voting Rights		✗	
Disputes		✗	✗
Legal Uncertainty		✗	✗
Counterparty Risk		✗	✗
Liquidity		✗	✗
Ability to Short			✓
Unfunded Trades		✓	✓
Fixed Cap		✓	✗
Coupon step-ups		✗	✓
Distressed Downgrade Event		✗	✓
Implied Writedowns		✗	✓
✓=advantage, ✗=disadvantage			

The mismatch between ABS CDS (synthetic ABS) and actual ABS is a fact. Depending on the particular circumstances, the overall effect of the mis-match can be slight or material. The key point for investors and other market participants is not to ignore the mis-match; not to treat ABS CDS and their underlying reference obligations as perfect substitutes for each other. In some cases, an ABS CDS offers benefits that can justify a significant pricing premium relative to the underlying security. In other cases, the opposite is true. Much depends on the details of the documentation for a given swap (the Confirmation) and on the optional features selected by the parties. Also, different market participants value liquidity differently. For now, those who ascribe a high value to liquidity probably will favor actual securities over CDS. In the future though, ABS CDS might become as liquid as their reference obligations, thereby leveling the field by one more increment.

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¹⁶ However, because the Dealer Form specifies physical rather than cash settlement, the protection seller would step into the shoes of an investor in the actual security and could wait for the eventual payout on the security.

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