
Barclays Capital

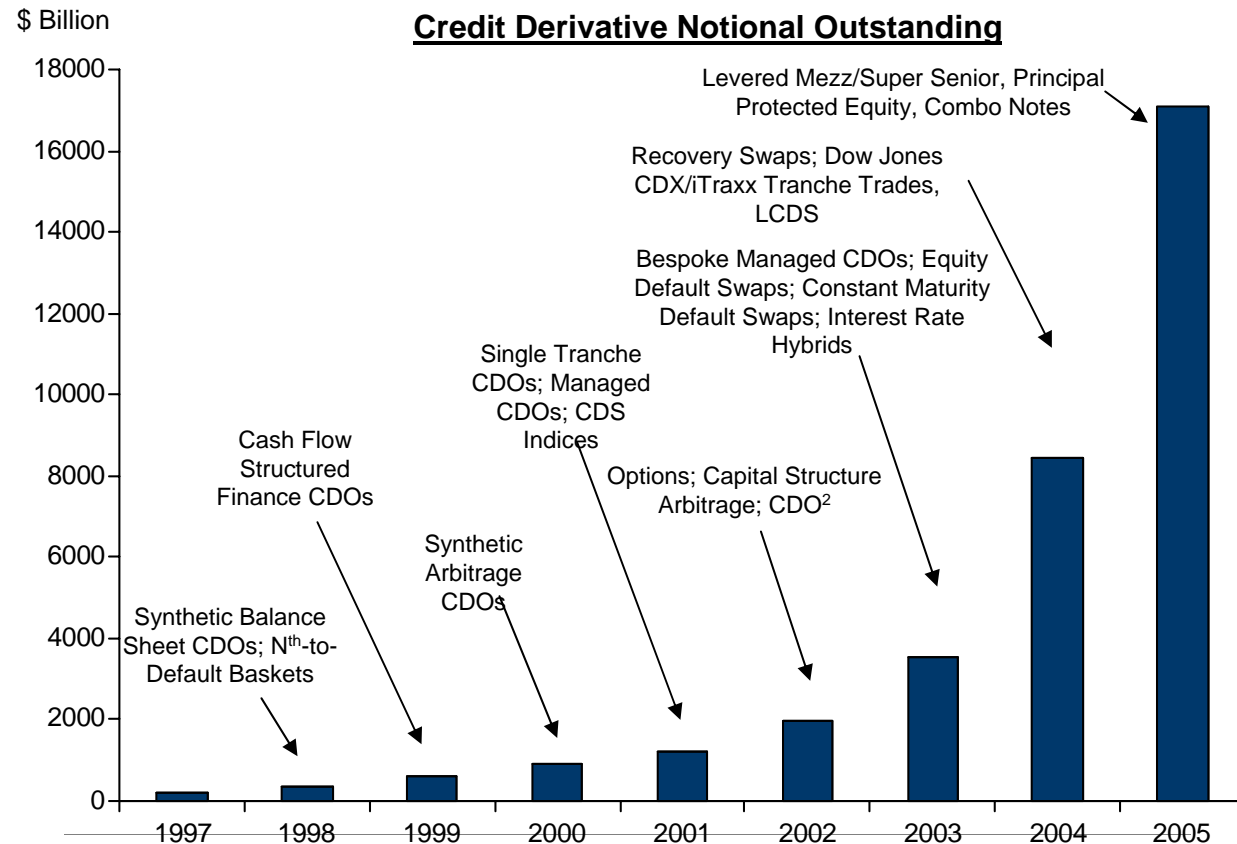
Introduction to Loan-Deliverable Credit Default Swaps

Moody's KMV Credit Practitioner Conference 2006

September 26th, 2006

Growth of Structured Credit Products

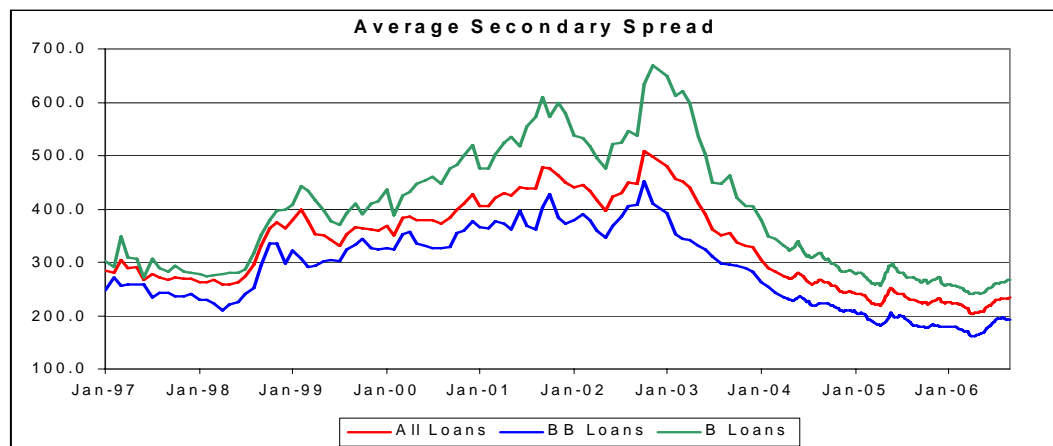
Structured credit products have grown dramatically with increased liquidity in credit derivatives and new derivative applications



Source: 1997-2003 data exclude asset swaps, British Bankers Association Credit Derivatives Report 2003/2004, 2004-2005 data, ISDA Market Survey 2004 and 2005

Loan-only CDS Market Update

Loan CDS spreads are currently at their all-time tight



- The number of participants in the secondary Loan and LCDS markets has increased dramatically over the past two years
- CDS markets are being shown on the break of many new issues, about 30 regularly quoted in inter-dealer broker markets
- Both ISDA and the LSTA have published loan-only CDS documentation for the industry to use as standardized documents
- The Rating Agencies are familiar with the standardized LCDS documents and are close to issuing comments on their use within CLO's.
- Mark-it Partners has been charged with the conducting of dealer polls and the maintaining of an official list of Reference Entity names; it will also continue its role as administrator for the future LCDX product

Source: Standard & Poor's LCD – Secondary Spreads by Rating & Industry, August 31st, 2006 (Prices as of August 25th, 2006)

Market Participants

Institutions Actively Using Loan-only Credit Default Swaps

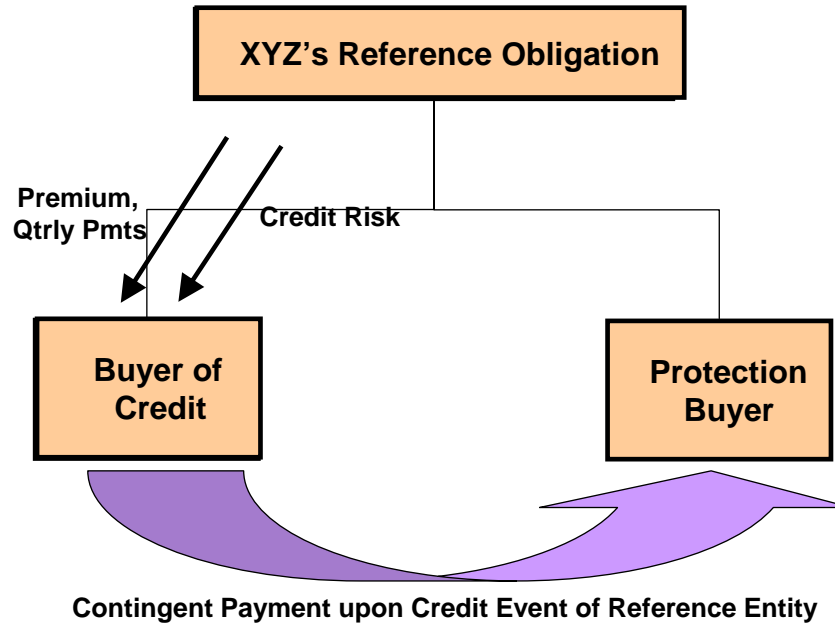
- **CLOs**
 - ▶ Access to illiquid deals
 - ▶ Ability to increase exposure to existing positions, e.g. on over-subscribed deals
 - ▶ Ability to tailor the product (maturity, coupon, callability)
- **High Yield Mutual Funds, traditional money managers**
 - ▶ Already familiar with credits in Bond space
- **Hedge Funds**
 - ▶ Funding arbitrage
 - ▶ Cheaper and greater leverage than TRS
 - ▶ Fewer operational headaches
 - ▶ Create tailored investments; increased flexibility to do Cap Arb trades
 - ▶ Opportunity to short loans (1st, 2nd lien)
- **Commercial and Investment Banks**
 - ▶ Revolver exposure
 - ▶ Bridge loans
 - ▶ Non-tradeable loans
 - ▶ Increase trading capacity elsewhere in firm

The Credit Default Swap

The Credit Default Swap

Trade Mechanics

- A Credit Default Swap is an agreement in which two parties exchange the credit risk of a Reference Entity without explicitly buying or selling the debt instrument (bond, loan, etc.).

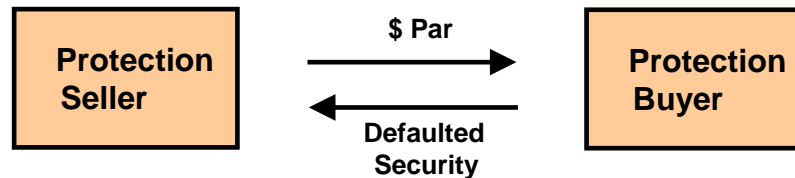


- The Protection Buyer pays a premium to the Protection Seller in exchange for the Seller's commitment to reimburse the Protection Buyer for losses resulting from a Credit Event
- The value of the contract varies with the XYZ's ability to ultimately repay its Reference Obligation (credit risk)

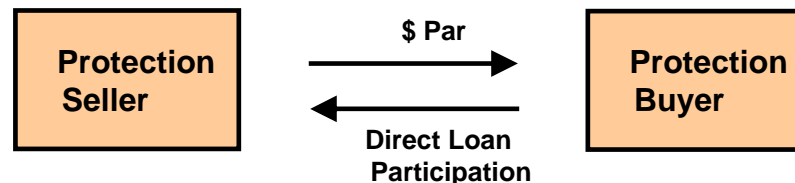
The Credit Default Swap: Settlement

Settlement Mechanics upon Credit Event

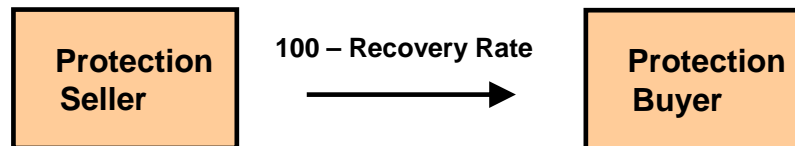
- The Loan CDS contract defaults to Physical Settlement initially
 - ▶ **Physical Settlement** – Buyer delivers defaulted obligations and Seller pays par



- ▶ **Direct Loan Participation** – If Buyer is unable to assign loan to Seller, Buyer will participate loan to Seller



- ▶ **Cash Settlement** – Seller can choose Cash Settlement in place of Direct Loan Participation; Buyer delivers nothing, but Seller pays par minus obligation recovery (price after default)

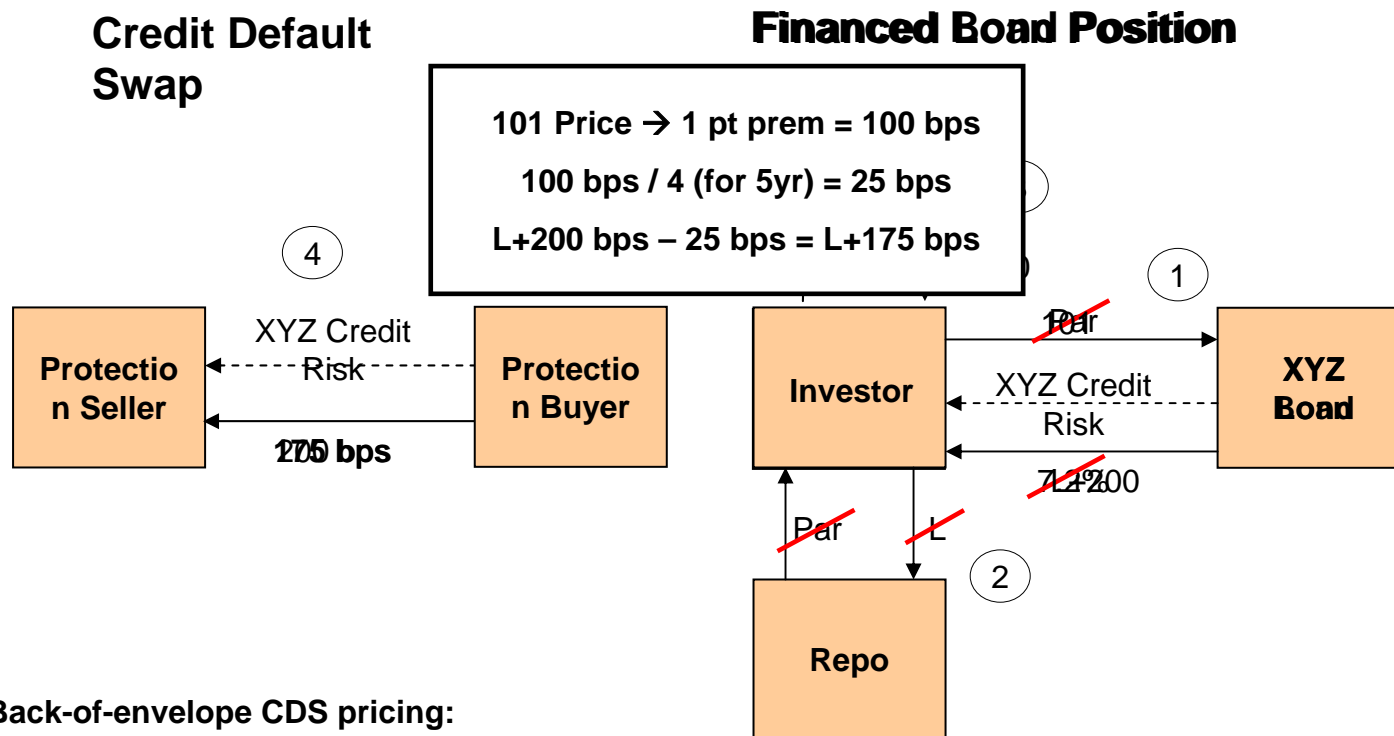


Loan-only Credit Default Swap: Conventions

Terminology

- **Protection vs. Credit** – The CDS market is quoted from a “protection” rather than a “credit” perspective. The ***Buyer of Protection*** is a ***Seller of the Credit*** and vice versa
 - ▶ As spreads widens (price declines in response to a riskier credit), protection becomes more valuable
- **Market Quotes** –
 - ▶ The market is quoted on a ***spread***, not a ***price*** basis
 - ▶ For example: A “110/130” market means the dealer would be willing to ***pay 110 bps per year*** to buy protection and would ***charge 130 bps per year*** to sell the same protection
 - ▶ ***5-yr*** contract standard, although curves will be maintained
 - ▶ Assumed ***75% recovery*** for valuations
- **Price** – All Credit Default Swaps have a reference price of 100% (par)
 - ▶ Although to a lesser extent than the cash loan, an LCDS trade will also be call constrained because of the optionality built into the contract
- **Leverage** – Typically 4-10% upfront haircut required, better than 10x leverage possible (in best-case scenario) for TRS
- **Trade Settlement** – LCDS trades settle ***T+1***, the same as bond-ref CDS

CDS Arbitrage-Free Pricing Model



Back-of-envelope CDS pricing:

- If loan is trading at premium (discount), can take the amount of premium (discount), divide by the PV01 – roughly the # of years remaining on the contract – and subtract (add) that to the LIBOR spread
- E.g. Loan trading at 101 \rightarrow 1% premium = 100 bps / 4 (assume for simplicity sake, for a 5-yr trade) = 25 bps. If par LIBOR swapped spread is 200 bps, equivalent spread-to-maturity (and CDS spread) is 200 – 25 bps = 175 bps

The Market Standard Loan CDS Contract

Goal: Create a tradeable synthetic loan product that addresses the needs of the majority of participants, facilitating the most liquid market possible

Sub-goal: Build off of existing CDS infrastructure, while accounting for the specific nuances of senior secured loans

- **Process** – Give and take between dealers and largest buyers of sellers of protection
- **Key Decision #1** – As with CDS on bonds, this should be a cap structure trade on the entire secured loan asset class, not a synthetic loan, participation agreement, or TRS
- **Key Decision #2** – Callability should be limited – termination only in the case of no secured loan deliverable into contract. This would account for the increased likelihood of secured loans being taken out of capital structure
- Credit events follow bond CDS conventions: Bankruptcy, Failure to Pay
- Designated Priority: 1st, 2nd or 3rd lien
- “Syndicated Secured” Characteristic: Only secured loans of Designated Priority or better are deliverable
- Revolvers are deliverable

Just Add An “L” – Differences Between CDS and LCDS

- **Callability:** Although limited in scope, the “non-callable” standard LCDS confirm actually contains a call feature which is triggered when no Senior Secured Loan of the designated Priority can be found. Either Buyer or Seller in this case can call the trade, and both parties walk away after accrued interest has been paid to the relevant date.
- **Credit Events:** Following HY CDS conventions, LCDS typically uses only two Credit Events:
 - ▶ **Bankruptcy:** The Reference Entity files for bankruptcy or takes similar actions.
 - ▶ **Failure to Pay:** After expiration of the applicable Grace Period, the Reference Entity fails to make a payment of principal or interest on specified Obligation(s).
- **Relevant Secured List:** Mark-it Partners will maintain a list of Deliverable Obligations that have been identified through a Dealer Poll. A Reference Obligation will not be needed for these names (only Ref Entity); for credits not on this list, a specific obligation will be identified as a Ref Ob.
- **Physical Settlement Rider:** Governs settlement of trade after Credit Event
 - ▶ “Stapled” delivery documentation to physically settle loan consistent with standard loan settlement practices
 - ▶ Market Standard Indemnity – protection buyer indemnifies seller for anything in PSA or upstreams inconsistent with the standard market practice applicable to the specific loan
 - ▶ Modified Delayed Comp

Valuing CDS: Mark-to-Market Example

The CDSW screen on Bloomberg provides MTM pricing for LCDS trades

GRAB
1<GO> to save Deal, 2<GO> to save curve source
CREDIT DEFAULT SWAP CPU: 300

Deal	Curves	View	Reference Obligation	ISDA Info	Amortization
Deal Information RED Pair:			Spreads Term		
Reference: Charter Communications Holdings LLC/Char			Curve Date: 9/ 6/06		
Counterparty: Deal#:			Benchmark: S 23 Ask		
Ticker: / Series: Privilege: F Firm			US BGN Swap Curve		
Business Days: USD Settlement Code: USD			Sprds: U User Ask		
Business Day Adj: 1 Following Currency: USD			883583 USD Senior IMM		
B BUY Notional: 10.00 MM Amortizing: N			Par Cds Spreads Default		
Effective Date: 8/ 5/06 Knock Out: N			Flat: Y (bps) Prob		
Maturity Date: 9/20/11 Day Count: ACT/360			6 mo 155.000 0.0305		
Payment Freq: Q Quarterly Month End: N			1 yr 155.000 0.0605		
Pay Accrued: I True First Cpn: 9/20/06			2 yr 155.000 0.1177		
Curve Recovery: I True Next to Last Cpn: 6/20/11			3 yr 155.000 0.1711		
Recovery Rate: 0.75 Date Gen Method: B Backward			4 yr 155.000 0.2212		
Deal Spread: 175.000 bps Debt Type: 1 Senior			5 yr 155.000 0.2683		
Calculator Mode: 1 Calc Price			7 yr 155.000 0.3546		
Valuation Date: 9/ 7/06 Model: J JPMorgan			10 yr 155.000 0.4647		
Cash Settled On: 9/11/06			Frequency: Q Quarterly		
Price: 100.77191729 Repl Sprd: 154.992 bps			Day Count: ACT/360		
Principal: -77,191.73 Days: 33			Recovery Rate: 0.75		
Accrued: -16,041.67 Sprd DV01: 3,930.20					
Market Val: -93,233.40 IR DV01: 17.88					
Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 920410					
Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2006 Bloomberg L.P.					
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Input terms of existing contract here

Current Spread

Recovery Rate

Mark-to-Market

Effect of Call Option on Pricing LCDS

- **If there is news on company:** If news is available that increases the likelihood of a take-out of all loans of the company, pricing on any assignments or unwinds (as well as new markets) will be affected. The two situations which could cause this likelihood of takeout to increase are:
 1. **Expected corporate actions (e.g. M&A activity).** Although certain companies may be more likely to undergo this activity than others, due to the uncertain nature of this information, Barclays will not adjust the maturity of the contract based on the probability-weighted expectation that this occurs.
 2. **Expected upgrade of company into Investment Grade.** An upgrade out of High Yield and into the Investment Grade universe often has the effect of dropping the collateral on a secured loan (most IG loans are unsecured, pari with bonds). Although this dynamic may not fit the desired profile of an out-performing credit, it should be an easier dynamic to prepare for, assuming the upgrades are done in a timely manner as a credit improves.
- **If there is no news on company:** Pricing will follow conventions in CDS market, with final maturity used in Bloomberg CDSW pricing screen (except in instances of 2. above)

Ways To Hedge Via LCDS

Bank Loan Portfolio Managers can take advantage of the LCDS market as a new hedging tool

- **Reasons to Hedge:**
 - ▶ Credit: Concentration limits per name or by industry. LCDS will match loan exposure on a 1-for-1 basis with the underlying loan
 - ▶ Regulatory: Free up capital restrictions for trading, investments
 - ▶ Can structure cheap hedges to stop losses in worst-case scenarios
- **Relative Value Proposition Across the Capital Structure:**
 - ▶ By comparing LCDS markets to equivalent bond-referenced CDS markets, a manager can decide which offers the most compelling hedging potential (see next slide)
- **Curve Considerations:**
 - ▶ **Short-dated LCDS:** By hedging to a shorter-than 5-yr date, a bank can take advantage of lower spreads (given a normal credit curve), while potentially matching the time for which the loan is expected to be outstanding. In some cases, one-year rolling CDS can make sense for credits that are expected to be stable over the long run.
 - ▶ **Long-dated LCDS:** Although generally longer-dated CDS is more expensive than shorter-dated, the roll-down effect is somewhat mitigated. Some banks are required to hedge until at least the maturity of their loan date for accounting or other reasons. CDS can be structured to match the exact maturity of the loan if necessary.

Fair Value of LCDS?

There are a number of ways to evaluate fair value of LCDS trading levels

- **Comparison to Cash Loan:**

- ▶ Traditional loan investors will estimate their return on their loans by estimating an **expected refinancing** date and then calculating their yield to that date. In the past, on average this date has tended to fall between 2-3 years after the loan was issued, due to the frequent nature of refinancings.
- ▶ Although this expected yield should not necessarily be reflected in the generally non-callable LCDS levels (since the contract will not necessarily terminate upon a refinancing), for lack of an alternative cash comparison, investors have often made this comparison of cash to LCDS levels.

- **Comparison to other securities within the company's Capital Structure:**

- ▶ **Same Implied Default Probability:** Both unsecured bond-referenced CDS and LCDS should imply the same default probabilities (given respective recovery rates). We can use this fact to give us relative value considerations by backing out the default probability of each security involved and seeing what it implies about the rich/cheap relative value of the securities.
- ▶ **Hedge Ratio:** Another way of looking at this same relative value proposition is to start with expected recovery rates and back out the long LCDS / short CDS (or vice versa) ratio that would leave an investor risk neutral under a default scenario, for example:

Position	Security	→	Recovery after Default	Gain/Loss on Default	Hedge Ratio Implied	HR-adjusted Spreads	Relative Value
Long	Loan (Par)	→	80%	-20%	2.5:1 Ratio Loans/Bonds	2.5 x 130 bps = 325 bps	Implication: Bond (CDS) is cheap to Loan (LCDS)
Short	Bond (Par)	→	50%	+50%		1 x 400 bps = 400 bps	

Note on Recovery Rates

- **Moody's** studies of recovery rates over the past two decades (i.e. prices one month after defaulting) on secured loans has been ~70%.
 - ▶ Moody's has implemented new expected Loss Given Default (LGD) ratings
- **S&P** also issues recovery ratings that indicate ultimate price of securities after conclusion of the bankruptcy/workout process
- **Recent defaults** have resulted in close-to-par recoveries on defaulted loans (e.g. Delphi, JL French)
- In today's benign credit environment, this recovery is expected to be higher than in the past. Dealers have agreed to use a **75% recovery rate** when valuing LCDS trades.
- **Future:** To the extent that a recovery lock market develops on senior secured loans, those traded recoveries can be used for LCDS valuation purposes. As more clarity on an average recovery for secured loans emerges, the 75% currently used may be replaced by a more realistic number.

Commonly Traded Names in Loans and LCDS

Industry	Companies				
AEROSPACE / TELECOM	United Airlines	K&F Ind	Windstream		
CHEMICALS	Ineos	Nalco	Hexion	Rockwood	Huntsman
CONSUMER NON-DURABLES	Eastman Kodak	Solo Cup	Jarden	Revlon	
FOOD/DRUG/Tobacco	Jean Coutu	Supervalu	Burger King	Constellation Brands	Dole Foods
FOREST PROD/CONTAINERS	Georgia-Pacific	Graham Pkg	Stone Container	Boise	OI
GAMING/LEISURE	Penn National	Venetian/ Macau	Boyd Gaming		
HEALTHCARE	DaVita	Healthsouth	CHS/Comm Health Sys	Warner Chilcott	
INFORMATION TECHNOLOGY	Sungard Data Sys	Fidelity Natl	Affiliated Comp Services	Aspect Software	
MANUFACTURING	JohnsonDiversey	Mueller Grp	Sensata		
MEDIA/TELECOM	Charter Comm	DirecTV	Mediacom	Panamsat, MGM	Cablevision , Cebridge
RETAIL	Neiman Marcus	Blockbuster	GGP, Toys R Us	Burlington Coat	Movie Gallery
SERVICE	Allied Waste	Hertz	United Rentals	Avis	
TRANSPORTATION	Goodyear Tire	Hayes	Lear	TRW Auto	CARS
UTILITY	NRG Energy	Reliant	Mirant	El Paso	

Ethical Wall Issues (Public vs. Private)

- **No trading on material non-public information on borrowers with securities**
- **Legal analysis** supports the view that both private and public loan participants may trade in the Loan CDS market, since loans are not considered securities
 - ▶ Trading in LCDS on true private borrowers (no securities) does not present insider trading issues
- **In practice:** Private loan market participants must exercise caution (e.g. establishing information barriers) to prevent signaling or tipping those that trade in securities, including public loan/LCDS market participants
- The trend is towards public side loan trading and enhanced disclosure requirements for borrowers

LCDS: Future Developments

Increased liquidity and Derivative Products

- Multiple dealers – 9 active dealers in LCDS
- LCDX – Index product, expected launch Dec/Jan time frame
- European LCDS already started limited trading, Index set to be trading soon
- Stressed / Distressed LCDS trading opportunities
- Structured products (Fixed Recovery, Tranche trading, 1st-to-default baskets, etc.)
- Potential for Cash-settled trades

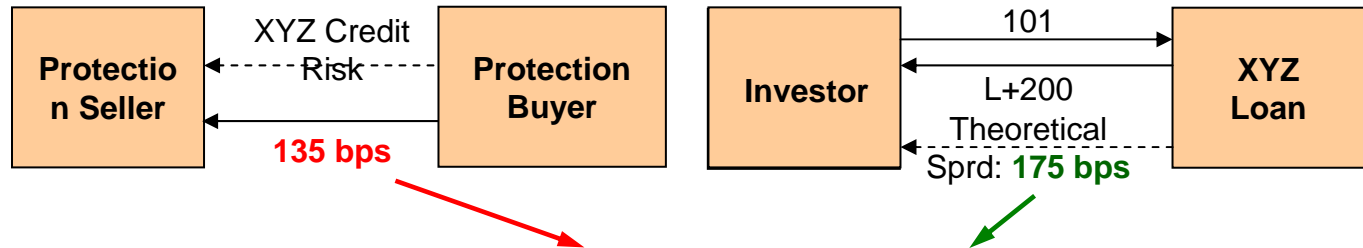
Appendix

Quick Re-cap on Loans

- **Evolution of the market:** Accounting for about one-third of all High Yield debt, leveraged loans have increasingly been tapped as a less expensive source of financing for companies. The standardization efforts of the Loan Syndications and Trading Association (LSTA) have helped to promote a robust secondary loan market, which has added to the liquidity available to issuers.
- **Leveraged Loans:** A credit agreement often governs multiple loan tranches
 - ▶ **Revolver (R/C):** A revolving credit facility acts as a bank line for the issuer, which can be drawn down on when the company needs cash. A full spread is only paid on drawn amounts, while a commitment fee is paid on the entire facility. IG Revolvers tend to go for 364 days, while HY Revolvers are typically 5 years.
 - ▶ **Letter of Credit (LOC):** Guarantee issued by a bank (or group of banks) on behalf of the issuer covering a specific amount. Typically pays the same spread as the funded Term Loan
 - ▶ **Term Loans:** Term loans are fully-drawn, LIBOR-based debt obligations of a company
 - **TL A:** Often held by banks, usually has an accelerated amortization schedule
 - **TL B/C/D:** The primary investment choice for institutional investors, typically little to no amortization, issued as a 6-or-7 year obligation
 - **Delayed-Draw:** Funding availability for limited time to make specified purchases (e.g. acquisitions, equipment, etc.)
 - **2nd Lien Loans:** Have a second priority claim on collateral after 1st Lien loans
- **Note on loans in Investment Grade:** Often leveraged loan agreements contain clauses that allow for the collateral to be dropped when the loan is upgraded into Investment Grade. IG loans therefore **tend to be unsecured** and rank pari-passu with the bonds in the capital structure. Although a Loan-only CDS market referencing IG loans is possible (i.e. restricting deliverables to the unsecured loan), due to the widespread acceptance of the unsecured bond-referenced CDS market, this market has not developed beyond occasional one-off transactions, mostly executed due to special circumstances.

Basis between Cash and CDS

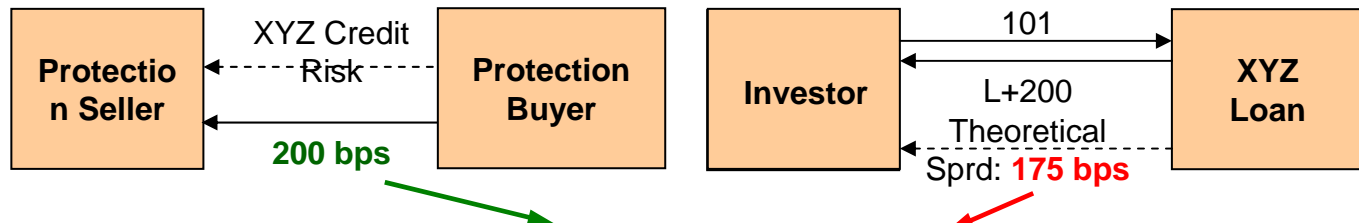
Negative Basis



Negative Basis: CDS Spread < Theoretical Swapped Spread

- Negative basis trade: **Buy Protection**; **Buy Loans**. Trade will result in positive carry, i.e. earn differential between Cash and CDS spreads on risk-neutral trade

Positive Basis



Positive Basis: CDS Spread > Theoretical Swapped Spread

- Positive basis trade: **Sell Protection**; **Sell Loans**. Without ability to short loans outright, this type of trade is limited to selling existing loans outright (esp. if trading above par, to lock in premium gain) and replacing the exposure with LCDS on the same name.

Basis is Driven by a Multitude of Factors

- **Positive Basis (CDS > ASW – Asset Swap Spread) is driven by**

- ▶ Fundamental Reasons:

- “Cheapest-to-deliver” option; investor is short CTD option when selling default protection
 - Efficient shorting mechanism for investors (guaranteed term repo)
 - CDS cannot go negative (high rated credits)

- ▶ Technical Reasons:

- CDS market reacts more quickly to bad news than retail-held cash bonds
 - Demand for new issuance/convertible names protection
 - Liquidity
 - Discount bonds

- **Negative Basis (CDS < ASW) is driven by**

- ▶ Fundamental Reason

- Implicit Libor flat funding for long credit positions
 - Off balance sheet transaction/Increased opportunity for leverage
 - Counterparty risk

- ▶ Technical Reasons

- Dealers aggressively selling default protection they have bought from investors via synthetic CDO issuance
 - Liquidity
 - Premium bonds

History of Loan Spreads and the Basis

Loan CDS spreads are currently at their all-time tights

- **Past:** Spreads traded at a premium to the underlying cash market (i.e. a positive basis) due to the illiquidity of the product and a tougher credit environment
- **Present:** With the increase in the number of participants both in the secondary loan market and the LCDS market, CDS spreads now trade with a large negative basis, on average 40-50 bps
- However, the assumed basis will depend on an investor's particular view of when the loan gets refinanced
- There are a number of major factors in general that drive the basis between Loan and LCDS:

Factors that Decrease the Basis	Factors that Increase the Basis
<ul style="list-style-type: none">▪ Non-callable nature of CDS (in general)▪ Leverage▪ Not subject to amortizations, pre-payments, re-pricings	<ul style="list-style-type: none">▪ Liquidity▪ Absence of voting rights, amendment fees, relationship with issuer▪ Presence of large Revolver

Rationale for players in the Loan-only CDS Market

Sellers of Protection	Buyers of Protection
<ul style="list-style-type: none"> ▪ When a loan is trading at a premium, the premium above par is lost upon a refinancing or default. CDS contracts always reference par so at inception the seller of protection is only exposed at par ▪ CDS will act like a fully funded position with a premium similar to a term loan spread ▪ Can achieve leveraged loan position through CDS ▪ Settlement, documentation, and operational aspects of CDS may be easier than those of cash loan market ▪ Potential for greater return given non-callable nature of product 	<ul style="list-style-type: none"> ▪ Cheaper than Unsecured CDS Protection ▪ Eliminate Basis Risk – hedge 1-for-1 with loan ▪ Blind to the Issuer ▪ No alternative way to short loans currently ▪ Contract will terminate upon absence of 1st Lien Loans of Issuer outstanding ▪ Take advantage of tight spreads during current favorable credit cycle

Relative Value Trade Construction

- **Sector Trades**

- ▶ Isolate credit view
- ▶ Limit curve, rate and repo risk
- ▶ Easy to execute as pair
 - e.g., short x credit, long y credit (credits in same sector)

- **Capital Structure Trades**

- ▶ Express recovery rate views (senior vs. subordinated)
- ▶ Hedge structured assets (e.g., asset backed securities)
- ▶ Credit vs. equity
- ▶ More targeted than cash market allows
- ▶ E.g., sell SUB protection at 65 bps and buy SENIOR protection at 30 bps
 - Make 35 bps running
 - Makes sense if you think the expectations of relative recovery rates for sub are going to improve which will cause sub spreads to tighten relative to senior
 - Risk is the discrepancy in recovery values of senior and sub if there is a default

Relative Value Trade Construction

- **Basis Trades**

- ▶ Hedging
- ▶ Spread pickup
- ▶ E.g., sell protection, sell bonds or buy protection, buy bonds
 - Sell 2Y protection at 19 bps; If the floaters trade around L flat, by investing in CDS and selling your floater, the investor receives a 19bps yield pickup

- **Curve Trades**

- ▶ CDS curves are becoming more fully developed as older 5-yr CDS trades roll down the curve and market becomes more efficient, transparent and liquid

- **Forward positions**

- ▶ E.g., sell 5 year protection + buy 1-yr protection creates forward starting 4-yr CDS trade where you are long credit risk: Locks in level and can be very cheap when credit curve is steep: Sell 5Y protection on a credit at 160bps; Buy 1Y protection on the same credit at 50bps

LCDS Trade Ideas

There are many strategies that can be employed when trading
LCDS

Strategy	Specific Trade	Rationale
Outright Long	Sell Protection	Get exposure synthetically to credit for relative value reasons; add incremental exposure after primary market allocations
Outright Short	Buy Protection	No way to short loans in cash market; hedge positions; take advantage of potential spread widening situations
Cap Arb Trade	Sell Loan CDS, Buy Unsecured Bond CDS	Take advantage of perceived mispricing of unsecured (bond) vs. secured (loan) parts of capital structure for appreciation and carry
Replace Cash with Synthetic	Sell Loan, Sell Loan CDS	Sell/monetize call-constrained loan trading at premium; gain exposure to par CDS instrument at comparable or better spreads
Refinancing Trade	Buy Revolver, Buy Loan CDS Protection	Earn carry from Revolver commitment fees vs. paying for Loan CDS to short date that corresponds to expected refinancing date. Early refinancing while CDS still has value – or additional funding (at a higher spread) – will result in higher return on trade

Barclays Capabilities

Barclays: a high quality counterparty...

Barclays is a high quality counterparty, both reputationally and in terms of credit quality, with a significant balance sheet capacity of £440B



Aa1/P-1 (stable outlook)



AA/A-1 (stable outlook)



AA+/F1+ (stable outlook)

- With 5,300 employees in 21 countries, Barclays Capital has a distinctive business model with a focus on debt finance and risk management solutions for clients:
 - Barclays was named “Derivatives House of the Year” by Risk Magazine (January 2005)
 - Barclays ranks No. 4 in Global All Debt League Tables (Source: Dealogic, September 2005)
 - Barclays leverages on its historical leadership in the UK and has expanded across Europe and the US to become No. 3 in Euromarket Issues (all currencies) (Source: IFR/Thomson Financial, September 2005) and No. 4 in all US Investment Grade Bonds (3Q 2005 – Source: Thomson Financial, 2005)
 - This success is reflected across debt asset classes and in particular in ABS where Barclays is No. 3 in Euromarket ABS Bookrunners (3Q 2005 - Source: SDC Platinum, September 2005)
- Growth in credit derivatives constitutes a core implementation of Barclays long-term strategic commitment to provide clients with a global debt product range:
 - Credit derivatives benefit from Barclays' strong distribution capabilities involving a 300 strong sales force covering over 650 institutional investors globally and a dedicated structured products sales team of 21 individuals

... With a strong structured credit track record

Barclays can provide investors with a wide range of credit derivative products

- ▶ Single Name CDS and indices: Barclays is a market maker in DJ CDX and iTraxx with a trading volume of around EUR 3B per month on indices and over EUR 10bln per month on single names
- ▶ Leveraged and financing structures:
 - Vanilla CLNs (including leveraged notes and index replication products)
 - Nth to Default Trades (Rated and unrated, funded and unfunded)
 - Total Rate of Return Swaps (referencing single names and indices)
 - SPV Structures (stand alone and multi-issuance on all types of debt and CDS underlyings)
 - Structured Asset Swaps (including double-up, switchable asset swaps and perfect asset swaps)
- ▶ Synthetic CDOs:
 - Corporate Multi-tranche & Single-tranche in static or managed format
 - CDO² and CDOs of ABS
 - Funded and unfunded form
 - 1– 10 year maturities
- ▶ Hybrid products that can be offered individually or included in a structured product in order to meet investors' risk/return objectives:
 - Credit/Interest Rate, Credit/Equity and Credit/FX contingent vanilla and exotics
 - Options on CDS (single name and index)
 - Constant Maturity Default Swaps and Step-Up structures

Industry Recognition in Credit Derivatives (Cont.)

Barclays has continually ranked highly in the CreditFlux portfolio credit swap league tables (2005) for corporate underlying portfolios

- ▶ Ranked Number 1 in Q2 2005
- ▶ Ranked Number 3 in 2004 Overall

Overall 2004

	Arranger	\$m	%
1	JP Morgan	7,601	12
2	Morgan Stanley	6,136	10
3	Barclays	5,422	9
4	Citigroup	2,780	5
5	SG	2,370	4

Q1 2005

	Arranger	\$m	%
1	JP Morgan	9,371	39
2	HSBC Bank	4,031	17
3	Morgan Stanley	3,646	15
4	Bear Stearns	2,332	10
5	Citigroup	1,227	5
6	BNP Paribas	786	3
7	Calyon	619	3
8	RBC Capital Markets	586	2
9	SG	443	2
10	Barclays	415	2
	others*	362	2
	TOTAL	23,820	100

Q2 2005

	Arranger	\$m	%
1	Barclays	25,554	42
2	JP Morgan	15,562	25
3	HSBC	4,262	7
4	Morgan Stanley	3,991	7
5	Citigroup	2,997	5
6	Calyon	1,981	3
7	Bank of America	1,768	3
8	Nordea Bank	1,442	2
9	Bear Stearns	1,008	2
10	Merrill Lynch	696	1
	others*	2,112	3
	TOTAL	61,374	100

Q3 2005

	Arranger	\$m	%
1	JP Morgan	23,656	32
2	HSBC	21,379	29
3	SG	12,008	16
4	Barclays	10,853	14
5	Morgan Stanley	6,616	9
6	Citigroup	6,348	8
7	Calyon	5,278	7
8	Merrill Lynch	4,534	6
9	Bank of America	3,492	5
10	RBC Capital Markets	659	1
	others*	- 19,879	- 27
	TOTAL	74,944	100

Source: CreditFlux: Leading portfolio credit swap counterparties (Q1-Q3 2005 and Overall 2004) League tables based on tranche sizes.



Industry Recognition in the Debt Market

The credit derivatives group also leverages on Barclays Capital recognition in the debt market

FY 2001

	Manager or Group	% Share
1	Citigroup	12.3
2	JP Morgan	11.4
3	Deutsche Bank	8.4
4	Bank of America	5.7
5	Merrill Lynch	5.1
6	CSFB	4.9
7	Morgan Stanley	4.6
8	Barclays Capital	4.2
9	Lehman Brothers	3.7
10	Goldman Sachs	3.5

FY 2002

	Manager or Group	% Share
1	JP Morgan	10.0
2	Citigroup	9.9
3	Deutsche Bank	7.5
4	Bank of America	5.3
5	Barclays Capital	4.5
6	Morgan Stanley	3.8
7	CSFB	3.7
8	Lehman Brothers	3.5
9	Goldman Sachs	3.5
10	ABN-AMRO	3.5

FY 2003

	Manager or Group	% Share
1	Citigroup	10.6
2	JP Morgan	8.4
3	Deutsche Bank	7.3
4	Barclays Capital	4.7
5	Morgan Stanley	4.3
6	BNP Paribas	4.1
7	Bank of America	3.9
8	HSBC	3.8
9	ABN Amro	3.6
10	CSFB	3.5

FY 2004

	Manager or Group	% Share
1	JP Morgan	9.1
2	Citigroup	9.0
3	Deutsche Bank	6.4
4	Barclays Capital	5.3
5	Bank of America	5.1
6	BNP Paribas	3.9
7	ABN Amro	3.8
8	Merrill Lynch	3.7
9	CSFB	3.7
10	HSBC	3.6

3Q 2005

	Manager or Group	% Share
1	JP Morgan	8.8
2	Citigroup	8.4
3	Deutsche Bank	6.3
4	Barclays Capital	5.1
5	Bank of America	4.7
6	BNP Paribas	4.6
7	HSBC	3.8
8	ABN Amro	3.7
9	RBS	3.4
10	CSFB	3.0

- Historical leadership in the £ Bond Market (Source: Thomson Financial (SDC code K5), 3Q 2005)
- No. 4 in Global All Debt League Table (Source: Dealogic, September 2005)
- No. 3 Euromarket ABS Bookrunners (3Q 2005 - Source: SDC Platinum, September 2005)
- No. 4 in all US Investment Grade Bonds (3Q 2005 – Source: Thomson Financial, 2005)

Strength In Our Chosen Areas of Focus

Commodities

- 24 hour trading and risk management services from our London, New York, Singapore and Sydney offices
- Wide range of physical and financial derivatives, ranging from the simplest vanilla trade to the most exotic structured product including index based products such as GSCI
- Structured Products team providing high value-added financing, risk management and diversification solutions
- Products include:
 - Metals (Base and Precious)
 - Energy (Crude Oil, Refined Product, EUR Power and Gas and US Financial Gas)
 - Other Special Markets (Weather, Renewables, Emissions, Freights, Coal and Softs)
- Awards include:
 - 2005 Energy Research House of the Year (Energy Risk)
 - 2005 Emissions House of the Year (Energy Risk)
 - 2004 Gold Award in Energy Trading (Energy Business)
 - 2004 European Natural Gas House of the Year (Energy Risk)
 - 2004 Energy and Commodity Derivatives House of the Year (Risk)
 - Technology Award for Best Electronic Commodities Trading Platform (Euromoney)

Foreign Exchange

- 24 hour trading and risk management services from our London, New York, Tokyo and Singapore offices
- Liquidity in all currencies (240)
 - Market leader in Sterling liquidity
- Integrated FX emerging markets team in both Sales & Trading
- Aggressive, competitive pricing in vanilla and 2nd and 3rd generation exotic options
- Award winning e-commerce platform – BARX FX
 - Live streaming prices with straight-through processing capabilities
 - FX connectivity geared towards high frequency black box models
 - ECN connectivity via Currenex, FXAll and FXConnect
- Full range of cross product prime brokerage services
- Awards include:
 - April 2005 Best Click & Deal Execution and Best Multi-Product Platform (Profit & Loss)
 - May 2005 Global Market Share #5, efx Market Share #3, efx Platform #3, EUR/GBP #3 and USD/GBP #3 (Euromoney FX Poll)
 - November 2004 USD/GBP #1, EUR/GBP #2 and Best e-Trading #5 (FX Week Best Banks Survey)
- Euromoney FX survey shows Barclays improving from #11 in 2001 to #5 in 2005

Derivatives

- 24 hour trading and risk management services from our London, New York, Singapore and Sydney offices
- Products include:
 - Interest Rate Derivatives (Interest Rate Swaps, Forwards and Options)
 - Currency Derivatives (Over 90 currencies and 24-hour execution)
 - Equity Derivatives (Swaps, Options and Structured Investments)
 - Credit Derivatives (Public & Non-Public Debt, Commercial Loans, High Yield and Emerging Market Bonds)
 - Emerging Market Derivatives (Executions in over 35 local currency and debt markets)
- Awards include:
 - 2005 Derivatives House of the Year (Risk)
 - 2006 Currency Derivatives House of the Year (Risk)
 - January 2006 #1 Single Deal Market for EUR, USD and JPY Interest Rate Swaps (Bloomberg)
 - November 2005 Overall Winner for Best Trading System Achievement (Banking Technology)

Asset Based Securities

- Barclays, with over 100 professionals in New York and London, is one of the leading ABS houses
 - Led \$73 billion in term ABS transactions in 2005
 - Co-managed an additional \$81 billion in 2005
 - Operates one of the largest ABCP programs with total commitments of over \$30 billion and outstandings of over \$20 billion
- Barclays ABS offers top distribution capabilities across the credit card, auto, and mortgage ABS asset classes
- Esoterics ABS group securitization capabilities include: rental fleet, timeshare loans, intellectual property streams, insurance premiums, lottery settlements, structured settlements, franchise loans, cell phone tower leases, film libraries and toll roads
- Our multi-seller conduit, with over \$25.8 billion in purchase commitments, and term ABS solutions can be help optimize sponsor financings
- Results include:
 - #3 in Credit Card ABS FY 2005 (Improved from #4 in 2003)
 - #4 in US Auto ABS FY 2005 (Improved from #7 in 2003)
 - Top international and Euromarket placement agent for ABS
 - Top 5 international and European RMBS

Commercial Real Estate

- US Real Estate Capital Markets Group opened for business in June 2004, filling a strategic gap in Barclays Capital's Global Credit Business
- Committed \$15B since June 2004
- CMBS Group employs almost 50 professionals in an integrated business model including:
 - Origination
 - Underwriting & Structuring
 - Securitization & Distribution
 - Trading
 - Banking
- CMBS Group's professionals have extensive backgrounds in commercial real estate lending, finance, investments, securitization and whole loan/CMBS trading and average over 15 years of industry experience per person
- CMBS Group offers a range of financing solutions including:
 - Fixed and floating rate mortgage loans
 - Non-stabilized floating rate mortgages
 - Subordinated mortgage loans, mezzanine debt, preferred equity, and equity
 - Credit facilities
 - Acquisition and bridge financing

Capabilities in Leveraged Loan Derivatives

Barclays offers its clients complete Leveraged Loan Derivative capabilities, combining the best expertise on the Street in both Total Return Swaps (TRS) and Loan-only Credit Default Swaps (LCDS), and allowing Barclays to customize solutions to meet each client's individual needs

Total Return Swaps

- Gives investors efficient access to loans at enhanced rates of return
- Ability to source deals in both primary and secondary loan markets
- Administered by a professional CLO trustee, at Barclays cost
- Can be actively managed by the investor or by a third party manager, customized to match investor's changing risk appetite

Loan CDS

- Plan to offer liquid markets in 100 LCDS names
- Can work on individual axes for clients on a one-off basis
- Plan to be active market-maker in LCDX index product
- Trading strategies across asset classes and between cash and synthetic products
- Experience with LCDS documentation, settlements, and Rating Agencies

Contact Information

For additional information:

Jeremy Vogelmann (jeremy.vogelmann@barcap.com) 212-412-5441

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